



VSB – TECHNICAL UNIVERSITY OF OSTRAVA  
FACULTY OF ECONOMICS

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Fundamentální analýza Coca-Cola, Inc.  
Fundamental Analysis of Coca-Cola, Inc.

Student: Bc. Min Wang

Supervisor of the diploma thesis: Ing. Kateřina Kořená, Ph.D.

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Department of Finance

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1. Introduction
2. Description of Fundamental Analysis Methodology
3. Macroeconomic Analysis of Coca-Cola
4. Industry Analysis of Coca-Cola
5. Company Analysis of Coca-Cola
6. Conclusion

Bibliography  
List of Abbreviations  
Declaration of Utilization of Results from the Diploma Thesis  
List of Annexes  
Annexes

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Ing. Iveta Ratmanová, Ph.D.  
*Head of Department*



prof. Dr. Ing. Dana Dluhošová  
*Dean of Faculty*

The declaration

"Herewith I declare that I elaborated the entire thesis, including all annexes,  
independently. "

Ostrava dated 21/04/2016

王敏  
Min Wang

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# **1 Introduction**

As we know, the Coca-Cola Company is the world's largest beverage company which owns more than 500 nonalcoholic beverage brands, 3,000 different beverage products. Coca-Cola Company manufactures and distributes various nonalcoholic beverages worldwide. However, how about the situation of Coca-Cola Company stock price which is fair, overpriced or underpriced for such a well-known large global company? Whether are current internal and external environment be conducive to the growth of the company's stock price or not? Whether is it a good investment for investors to buy the stocks of Coca-Cola Company? The thesis will primarily be used to analyze and explore these problems.

The main purpose of this thesis is to evaluate the stock intrinsic value of Coca-Cola Company and to help investors to measure whether stock of Coca-Cola Company is worth to buy, hold or sell. It means that the result of this thesis is analysis recommendation for the investors.

The thesis is divided into six chapters. The chapter I is the introduction of this thesis which mainly introduces the reasons why we select this theme of fundamental analysis of Coca-Cola Company, the purpose of writing paper and the general framework of paper. The chapter II is the description of fundamental analysis methodology including financial analysis methods, financial equity valuation models and SWOT analysis. In the chapter III, we focus on describing current world economic situation and analyzing the U.S. economy environment using some basic economic indicators and further measuring their influence on the Coca-Cola Company stock price. In chapter IV, we mainly separate four parts to analyze the Coca-Cola Company's industry environment including introducing basic situation, positioning industry type, analyzing industry life cycle and measuring the company-owned industry competitive environment using Porter five forces analysis model to further analyze the influence of industry environment on the Coca-Cola Company stock price. Chapter V is the company analysis of Coca-Cola Company from 2009 to 2013. This chapter is divided into five parts. Firstly, we use financial analysis method to measure company financial situation. Secondly, we use special financial equity



valuation models to determine the company stock intrinsic value. Thirdly, we summarize the estimated equity intrinsic value and help the investors to analyze whether Coca-Cola Company stock is worth to buy, hold or sell. Then we use SWOT analysis to analyze the situation of Coca-Cola Company during these years and find out possible solutions for its problems. At the end of this section, we give the investment recommendation for investors based on company analysis. The chapter VI is the conclusion of the thesis which mainly contains the description of fundamental analysis, the summary of macroeconomic environment, industry conditions and company own financial position and influence of these factors on the Coca-Cola Company stock price, results of the intrinsic value of Coca-Cola Company stock, opinion on company development and investment recommendation on the Coca-Cola Company stock price.

## **2 Description of Fundamental Analysis Methodology**

Financial analysis, calculation of equity intrinsic value and SWOT analysis are necessary in company analysis. Selected financial analysis methods, special equity valuation models used to calculate the company stock intrinsic value and SWOT analysis are introduced in this section.

### **2.1 Financial analysis methodology**

The financial analysis of company is the process of selecting, evaluating and interpreting financial data and then formulating the assessment of the company's present and future financial position. Several financial analysis methods specifically common-size analysis, financial ratio analysis are introduced (Madura, 2008).

#### **2.1.1 Common-size analysis**

The common-size analysis is the analysis of financial statements data and their changes over the time and makes us identify the trends and the major differences.

The common-size analysis has two types which are horizontal common-size analysis and vertical common-size analysis.

##### **a) Horizontal common-size analysis**

Horizontal common-size analysis is the analysis of the evolution of financial statements data over the time or their changes with respect to a given period as the benchmark. We use the accounts in a given period as the benchmark and restate every account in other year is compared relatively to the accounts in given period.

Horizontal common-size analysis is a time-series analysis which is useful for identifying trends and growth in accounts over time.

## b) Vertical common-size analysis

Vertical common-size analysis is the analysis of the changes in the proportions of selected benchmarks (total revenue, total assets, etc.). We use the account in a given period as the benchmark item and compare other accounts to the benchmark item in that same year.

We can use vertical common-size analysis to analyze patterns in investments and financing (using common-size balance sheet) and the patterns in profitability (using common-size income statements) and have knowledge of the financial situation through comparing the proportions over time for the company.

### **2.1.2 Financial ratio analysis**

Financial ratio analysis is a method of analyzing data which uses the financial accounting and other information to assess the financial situation of the company. Financial ratio analysis takes the information off the balance sheets and income statements of a company and calculates ratios that are used to assess the operating ability and future financial position of the company (Madura, 2008).

Financial ratio analysis can be classified several types to analyze the company's financial situation.

#### a) Profitability ratios

The profitability ratio is the analysis method which actually analyzes profit condition of the company.

- Gross profit margin

Gross profit margin is the ratio of gross profit (gross sales less cost of sales) to sales revenue. It measures the condition of profitability and how efficient a company uses its resources, materials, and labor. In addition, it can help the company control its costs. Higher gross margin for a company reflects greater efficiency in turning raw materials

into income. Its return usually is expressed as a percentage.

The formula of gross profit margin is as follows:

$$\text{Gross profit margin} = \frac{\text{Gross profit}}{\text{Total revenue}} . \quad (2.1)$$

- Operating profit margin

Operating margin (operating income margin), is the ratio of operating income divided by total revenue which is usually expressed as a percentage. It is a measurement of what proportion of a company's revenue is left over after costs of goods and operating expenses. A higher operating margin means that the company has less financial risk.

The formula of operating profit margin is as follows:

$$\text{Operating profit margin} = \frac{\text{Operating income}}{\text{Total revenues}} . \quad (2.2)$$

- Net profit margin

Net profit margin is the ratio of net profit divided by total revenue which is usually expressed as a percentage. Net profit margin measures that how much revenues are left after all costs expenses.

The formula of net profit margin is as follows:

$$\text{Net profit margin} = \frac{\text{Net income}}{\text{Total revenue}} . \quad (2.3)$$

- Return on assets (ROA)

Return on assets is the ratio of net income to assets. The return on assets (ROA) is an indicator on how earnings are relative to its total assets. Return on assets (ROA) measures the efficiency with which the company is managing its investment in assets and using them to generate profit.

The formula of return on assets is as follows:

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Total assets}} . \quad (2.4)$$

- Return on equity (ROE)

Return on equity is the ratio of net income to average shareholder's equity. Return on equity (ROE) measures the rate of return on investment by shareholders. It measures a firm's efficiency at generating profits from every unit of shareholders equity.

The formula of return on assets is as follows:

$$\text{Return on equity} = \frac{\text{Net income}}{\text{Total equity}} . \quad (2.5)$$

#### b) Liquidity analysis

Liquidity analysis is the analysis method which measures company whether there is an ability to generate cash to meet its immediate and short-term obligation.

There are three types of ratios to measure the company's liquidity which are current ratio, quick ratio and cash ratio.

- Current ratio

The current ratio is a financial ratio of current assets to current liabilities. This ratio measures whether a firm has enough short-term assets to meet its short-term liabilities.

The formula of current ratio is as follows:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} . \quad (2.6)$$

- Quick ratio

The quick ratio is the more strict liquidity analysis method which measures a company's ability to meet current liabilities with its most liquid assets. The quick ratio of one company is less than 1 which means that this company cannot currently pay back its current liabilities. If quick ratio is of 1:1 which means that a social enterprise can pay its bills without having to sell inventory.

The formula of quick ratio is as follows:

$$\text{Quick ratio} = \frac{\text{Cash} + \text{Short-term investment} + \text{Receivables}}{\text{Current liabilities}}. \quad (2.7)$$

- Cash ratio

Cash ratio is a ratio of corporate cash (cash and cash equivalents) to current liabilities. It can measure the company's ability to meet its current liabilities.

The cash ratio is the balance that liquid assets are apart from receivables. The cash ratio is generally believed that more than 20% is as well. If this ratio is too high which means enterprise-current liabilities have no getting the reasonable use and the cash asset has a lower profitability which resulting from the amount of such assets business opportunity cost increase.

The formula of cash ratio is as follows:

$$\text{Cash ratio} = \frac{\text{Cash} + \text{Short-term markable investment}}{\text{Current liabilities}}. \quad (2.8)$$

### c) Solvency analysis

Solvency ratios are used to measure a company's ability to meet its long-term debts and it is a measurement of the firm's long-term survival.

- Debt-to-asset ratio

Debt-to-assets ratio is the ratio of total debt to total assets. Debt-to-assets ratio is a measurement of the proportion of total assets which is financed with debt (including short-term debt and long-term debt).

The formula of debt-to-assets ratio is as follows:

$$\text{Debt to assets ratio} = \frac{\text{Total debt}}{\text{Total assets}} . \quad (2.9)$$

- Long-term debt-to-assets ratio

Long-term debt-to-assets ratio is the ratio of long-term debt to total assets. According to the long-term debt-to-assets ratio, we can see the proportion of the company's assets is financed with long-term debt.

The formula of Long-term debt-to-assets ratio is as follows:

$$\text{Long term debt to assets ratio} = \frac{\text{Long term debt}}{\text{Total assets}} . \quad (2.10)$$

- Debt-to-equity ratio

Debt-to-equity ratio is the ratio of total debt to total shareholders' equity. According to the debt-to-equity ratio (D/E), we can know the relative proportion of equity and debt is used to finance the company's assets and we can evaluate using book values of the capital sources which are provided on the balance sheet.

The formula of debt-to-equity ratio is as follows:

$$\text{Debt to equity ratio} = \frac{\text{Total debt}}{\text{Total shareholder's equity}} . \quad (2.11)$$

- Financial leverage

Financial leverage is the ratio of total assets to total shareholders' equity which is called the equity multiplier. Financial leverage measures the amount of a firm's assets that are financed by its shareholders.

The formula of financial leverage is as follows:

$$\text{Financial leverage} = \frac{\text{Total assets}}{\text{Total shareholder's equity}} . \quad (2.12)$$

#### d) Activity ratios

Activity ratios are the financial analysis methods which measure the effective utilization of a company's assets. It can be used to evaluate the benefits produced by specific assets.

We generally use inventory turnover, the total asset turnover and the receivables turnover to measure the turnover.

- Inventory turnover

Inventory turnover is the ratio of cost of goods sold to inventory. The Inventory turnover is an indication of the number of times inventory sold or used in a time period such as a year.

The low turnover means low sales and excess inventory. High inventory levels reflect an area unhealthy because they represent an investment with a rate of return of zero and it will affect the company's operating situation.

The formula of inventory turnover is as follows:

$$\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Total inventories}} . \quad (2.13)$$



- Receivables turnover

Receivable turnover is the ratio of total revenues to average accounts receivable. It shows the speed of flow of receivables. Generally, the accounts receivable turnover ratio is the higher the better. Because higher receivable turnover means the company's receivables can quickly recover and the company has a good assets liquidity and short-term solvency ability.

The formula of receivable turnover is as follows:

$$\text{Receivables turnover} = \frac{\text{Revenues}}{\text{Account receivables}} \cdot \quad (2.14)$$

- Assets turnover

Assets turnover is the ratio of total revenues to total assets. The asset turnover ratio tells investors how quickly an organization is able to turn an asset into cash. The higher assets turnover means the higher liquidity and higher efficiency of asset utilization.

The formula of assets turnover is as follows:

$$\text{Total assets turnover} = \frac{\text{Sales}}{\text{Total assets}} \cdot \quad (2.15)$$

## 2.2 Equity valuation models

Equity valuation models are financial models used to estimate the intrinsic value of the security which can help investors to determine the security is undervalued, overvalued or fairly valued through estimating intrinsic value of a security and comparing it with its market price.

There are three major categories of equity valuation models estimating the intrinsic value of a security which are dividend discount models, multiplier models and assets-based valuation models.

### 2.2.1 Dividend discount models (DDM)

Dividend discount model (DDM) is the simplest equity valuation model which estimates intrinsic value of a security as the present value of the future benefits expected to be received from the security (McMillan, Pinto, Pirie, and Venter, 2011).

The basic calculation formula can be expressed as

$$V_0 = \sum_{t=1}^n \frac{D_t}{(1+r)^t} + \frac{P_n}{(1+r)^n}. \quad (2.16)$$

Where,  $V_0$  is the value of a share of stock today, at  $t = 0$ ;  $D_t$  is the expected dividend in year  $t$ ;  $P_n$  is the expected price in  $n$  periods;  $r$  is the required rate of return on the stock.

In addition, dividend discount models (DDM) have several categories according to the status assumption of future dividend distribution such as Gordon growth model, two-stage dividend discount model and multistage dividend discount model.

#### a) Gordon growth model

Gordon growth model is one type of dividend discount model for determining the stock intrinsic value based on a future series of dividends. This model has an assumption that the dividend grows at a constant rate in perpetuity. Gordon growth model is appropriate for valuing the equity of dividend-paying companies that are relative in a mature growth phase and have the low to moderate growth rates (McMillan, Pinto, Pirie, and Venter, 2011).

The formula is as follows:

$$V_0 = \sum_{t=1}^{\infty} \frac{D_0(1+g)^t}{(1+r)^t} = \frac{D_1}{r-g}. \quad (2.17)$$

Where,  $V_0$  is the value of a share of stock today, at  $t$  is 0;  $D_0$  is the dividend per share, at  $t$  is 0;  $D_1$  is the expected dividend per share for next period from now;  $r$  is the required rate of return on the stock;  $g$  is the growth rate in dividends (in perpetuity).

#### b) Two-stage Model

The two-stage model estimates the company stock intrinsic value assuming the company have two stages of growth - an initial phase where the growth rate is not a stable growth rate and a subsequent steady state where the growth rate is stable and is expected to remain so for the long term. The model is generally used to value equity value of dividend-paying companies that are expected to post low or even negative growth rates for a few years and then revert back to stable growth (McMillan, Pinto, Pirie, and Venter, 2011).

The formula is as follows:

$$V_0 = \sum_{t=1}^n \frac{D_0(1+g_1)^t}{(1+r)^t} + \frac{V_n}{(1+r)^n} . \quad (2.18)$$

Where,  $V_0$  is the value of a share of stock today, at  $t = 0$ ;  $D_0$  is the dividend per share, at  $t$  is 0;  $g_1$  is the first phase growth rate which lasts for  $n$  years;  $r$  is the required rate of return on the stock;  $V_n$  is the terminal value at time  $n$ ;  $g_2$  is the second phase growth rate.

The formula calculating the terminal value at time  $n$  is as follows:

$$V_n = \frac{D_{n+1}}{r - g_2} . \quad (2.19)$$

Where,  $D_{n+1}$  is the dividend in the year  $n+1$ ;  $V_n$  is the terminal value at time  $n$ ;  $r$  is the required rate of return on the stock;  $g_2$  is the second phase growth rate.

The formula calculating the dividend at time  $n$  is as follows:

$$D_{n+1} = D_0(1 + g_1)^n(1 + g_2). \quad (2.20)$$

Where,  $D_{n+1}$  is the dividend in the year  $n+1$ ;  $D_0$  is the dividend per share, at  $t$  is 0;  $g_1$  is the first phase growth rate which lasts for  $n$  years;  $g_2$  is the second phase growth rate.

In addition, we know the estimate of the discount rate and the growth rate is critical in calculating company stock intrinsic value using equity valuation models. Equity valuation methods are heavily dependent on these two significant variables. So we need to introduce the method of estimating the discount rate and growth rate.

### **Estimating cost of capital**

We use Capital Asset Price Model (CAPM) to estimate the cost of capital. The formula calculating the cost of capital using CAPM model is as follows:

$$E(Re) = R_f + \beta [E(Rm) - R_f]. \quad (2.21)$$

Where,  $E(Re)$  is the required rate of return on share;  $R_f$  is the risk free rate;  $E(Rm)$  is expected return of market;  $\beta$  is stock's sensitivity to the market.

### **Estimating growth rate**

There are a variety of methods in estimating growth rate, including assessing the growth in dividends or earnings over time, using the industry median growth rate or sustainable growth rate and so all. We mainly introduce sustainable growth rate and implied dividend growth rate.

- Sustainable growth rate

Sustainable growth rate is the rate of dividend growth that can be sustained for a given level of ROE assuming that capital structure is constant through time. It is generally used in Gordon growth model and mature stage in multistage DDM to estimate the equity intrinsic value. It is derived based on two factors. One of those factors is the retention rate of earnings or “ $b$ ” and the other is the Return on Equity or ROE (McMillan, Pinto, Pirie, and Venter, 2011).

The formula for sustainable growth rate is as follows:

$$\text{SGR} = b \cdot \text{ROE}. \quad (2.22)$$

Where, SGR is sustainable growth rate;  $b$  is earnings retention rate; ROE is return on equity.

The formula for earnings retention rate is as follows:

$$b = 1 - \text{Dividend payout ratio}. \quad (2.23)$$

The formula for dividend payout ratio is as follows:

$$\text{Dividend payout ratio} = \frac{\text{Dividend per share}}{\text{Earnings per share}}. \quad (2.24)$$

- Implied dividend growth rate

Implied dividend growth rate can be calculated by using stock's current trading price and the Gordon growth model equation.

The formula for implied dividend growth rate is as follows:

$$\text{Implied dividend growth rate} = \frac{P_0 \cdot r - D_0}{P_0 + D_0}. \quad (2.25)$$

Where,  $P_0$  represents stock current price per share;  $D_0$  represents last year dividends per share;  $r$  represents required rate of return on share.

### **2.2.2 Multiplier models**

In contrast to the dividend discount models (DDM) which attempt to estimate the intrinsic value of the security based on its estimated growth rates and its discount rate, multiplier models determine the intrinsic value of a security based chiefly on share price multiples or enterprise value multiples.

Using share price multiple models, we primarily focus on analyzing and comparing the company's stock price to relevant variables that affect a stock's value, such as earnings, cash flow, book value, and sales to estimate the stock intrinsic value. However, enterprise values multiple models determining the stock intrinsic value mainly is based on the enterprise value. We mainly introduce the share price multiple models (Millan, Pinto, Pirie, and Venter, 2011).

a) Price-to-earnings (P/E)

Price-to-earnings (P/E) is the ratio of the stock price to earnings per share which shows how much investors are willing to pay per dollar of earnings.

The formula is as follows:

$$\text{Price – to – earnings ratio} = \frac{\text{Market price per share}}{\text{Earnings per share}}. \quad (2.26)$$

The formula calculating the equity intrinsic value based on P/E model is as follows:

$$V_0 = E_1 \cdot \frac{P}{E}. \quad (2.27)$$

Where,  $V_0$  is the intrinsic value of a share of stock today;  $E_1$  is the expected earnings per share next one year; P/E is the ratio of the stock price to earnings per share.

b) Price-to-cash-flow ratio (P/CF)

Price-to-cash-flow ratio (P/CF) is the multiplier model which evaluates the price of a company's stock relative to how much cash flow the firm is generating.

The formula is as follows:

$$\text{Price – to – cash – flow ratio} = \frac{\text{Market price per share}}{\text{Cash flow per share}}. \quad (2.28)$$

The formula calculating the equity intrinsic value based on P/CF model is as follows:

$$V_0 = CF_1 \cdot \frac{P}{CF}. \quad (2.29)$$

Where,  $V_0$  is the intrinsic value of a share of stock today;  $CF_1$  is the expected earnings per share next one year; P/CF is the ratio of the stock price to earnings per share.

#### c) Price-to-book-value (P/BV)

Price-to-book-value (P/BV) is the ratio for stock price per share to the book value per share. It can be used by investors to show how the market perceives the value of a particular stock to be.

The formula is as follows:

$$\text{Price – to – book – value ratio} = \frac{\text{Market price per share}}{\text{Book value per share}}. \quad (2.30)$$

The formula calculating the equity intrinsic value based on P/BV model is as follows:

$$V_0 = BV_1 \cdot \frac{P}{BV}. \quad (2.31)$$

Where,  $V_0$  is the intrinsic value of a share of stock today;  $BV_1$  is the expected book value per share next one year; P/BV is the ratio of the stock price to earnings per share.

#### d) Price-to-sales ratio (P/S)

Price-to-sales ratio (P/S) is the ratio which is used to measure the perceived value of a stock by the market compared to the revenues of the company. It is calculated by

dividing the stock price to sales per share. Sales per share uses the weighted average of shares for the time period evaluated, which is generally one year.

The formula is as follows:

$$\text{Price – to – sales ratio} = \frac{\text{Market price per share}}{\text{Sales per share}}. \quad (2.32)$$

The formula calculating the equity intrinsic value based on P/S model is as follows:

$$V_0 = S_1 \cdot \frac{P}{S}. \quad (2.33)$$

Where,  $V_0$  is the intrinsic value of a share of stock today;  $S_1$  is the expected sales per share next one year; P/S is the ratio of the stock price to earnings per share.

### **2.2.3 Asset-based valuation models**

Asset-based valuation models are equity valuation models which estimate stock intrinsic value from the estimated value of the assets of a company minus the estimated value of its liabilities. The estimated market value of the assets is often determined by making adjustments to the book value of assets and liabilities. This approach assumes that the value of a business is equal to the sum of the value of the business's assets (McMillan, Pinto, Pirie, and Venter, 2011).

The asset-based valuation model generally works well for companies that don't have a high proportion of intangible or "off the books" assets since the intangible assets are difficult in determining its fair value and "off the books" assets will don't contain the balance sheet. Using asset-based valuation models is not very accurate to estimate stock intrinsic value for the companies with a high proportion of intangible or "off the books" assets which general may result in underestimation. The formula calculating the equity intrinsic value based on asset-based valuation model is as follows:

$$\text{Intrinsic value} = \frac{\text{Book value}}{\text{Number of stocks}}. \quad (2.34)$$



The formula calculating book value is as follows:

$$\text{Book value} = \text{Total assets} - \text{Total liabilities.} \quad (2.35)$$

## 2.3 SWOT analysis

SWOT analysis is a useful analysis method which can be classified as strengths (S), weaknesses (W), opportunities (O) and threats (T). Additionally, the strengths and weaknesses belong to the internal factors. The opportunities and threats are external factors. Generally, strengths generally refer to company's resources and capabilities which can be used as the competitive advantages. Weaknesses are the company's internal factors which may affect firm's development. Opportunities are the company's external factors which may reveal new opportunities for company's profit or growth. Threats refer to the company's extremal factors which are not conducive to company's development.

SWOT analysis methods aim to measure the company's the internal environment and external environment by understanding company's the strengths, weaknesses, opportunities and threats and further evaluate and determine the company's future development strategies.

In addition, we always combined the strengths, weaknesses, opportunities and threats to analyze in SWOT analysis which form the so-called SWOT matrix (see Table 2.1) and further determine company future development strategies. The SWOT matrix is shown as the following table.

Table 2.1 SWOT matrix

<div>Internal External</div>	Strength	Weaknesses
Opportunities	S-O strategies	W-O strategies
Threats	S-T strategies	W-T strategies

### **3 Macroeconomic Analysis of Coca-Cola**

Macroeconomics is the field of economics that studies the behavior of the aggregate economy. Macroeconomics examines the changes of some economic indicators such as gross domestic product (GDP), unemployment rate, inflation rate, interest rates, tax rate and so all. These economic indicators can reflect the economic situation and predict the direction of the economy. Additionally, we know the stock market has relationship with the economic environment. So analyzing the macroeconomic economic situation is critical for measuring the intrinsic value and valuating Coca-Cola Company stock price trend.

This section is divided into two parts. First, we briefly describe the current world economic situation and analyze its influence on the Coca-Cola Company stock price. Then we introduce some basic economic indicators in U.S. such as gross domestic product (GDP), unemployment rate, inflation rate, interest rates and analyze these indicators to grasp and predict U.S. economy environment and its influence on the Coca-Cola Company stock price.

#### **3.1 Global economic environment**

The global economic environment has a significant impact on the company especially globalization company. The global economic environment can undermine global consumer confidence and affect consumers' purchasing power and further influence the demand of company product and company financial performance.

The Coca-Cola Company is the world's largest beverage company whose business distributes in more than 200 countries. Additionally, Company net operating revenues from sales of company products in international markets have a significant portion of company total net operating revenues reaching 58 percent in 2013. Based on the Coca-Cola Company business situation, we can know the global economic conditions will have a large influence on the Coca-Cola Company financial performance and Coca-Cola Company stock price.

Additionally, we know the sub-prime mortgage crack appeared in the United States housing market during the summer of 2007 and then began to widen the global financial landscape and ended with the full-fledged economic crisis. Then the world economy is mired in the great depression including the most advanced countries already in recession, the outlook for emerging and other developing economies deteriorating rapidly (Burns, Ransburg, 2013).

After a sharp, broad and synchronized global downturn late 2008 and early 2009, the world economy was on the mend from 2009. It is mainly manifested in that increasing number countries began to have the positive growth in GDP and international trade and global industrial production began to have a notable recovery. World equity markets have also rebounded and risk premiums on borrowing have fallen.

- **Global economic growth**

In the shadow of the global financial crisis, most developed economies were tried to look for appropriate fiscal and monetary policies, or other measures to deal with the challenges. Global GDP started to grow from 2009 but the growth speed is slow. In addition, according to World Economic Outlook (WEO)<sup>1</sup>, global GDP growth rate will respectively reach 3.6 % and 3.8 during 2014 and 2015. Overall, although the global economic had an increase, it was also in subdued trend.

- **Unemployment situation**

The global employment situation was still very severe, as long-lasting effects from the financial crisis continue to weigh on labor markets in many countries and regions.

Among developed countries, the employment situation in Europe was most serious. The unemployment rate in Greece and Spain were up to 27%, especially young people who had a more than 50% unemployment rate. The unemployment rate in the United States had continued its slow decline, but it still remained a relative high level

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<sup>1</sup> The World Economic Outlook (WEO) is a survey conducted and published by the International Monetary Fund.

which reached at 7% late 2013 (Burns, Ransburg, 2013). Meanwhile, the proportion of long-term unemployment in the developed economies was still hovering above 35% which would result in greater damage on the entire economy.

The unemployment situation was mixed across developing countries. North Africa and Western Asia had an extremely high structural unemployment. However, the unemployment rates across much of East Asia remained a lower level with below 3% in Malaysia, Singapore, Thailand and Viet Nam. The unemployment rate in South America, such as Brazil and Mexico, remained at about 6% or below. The unemployment rate remained at low in the Russian Federation, between 5% and 6% (Burns, Ransburg, 2013). Overall, global unemployment problem had improved, but the crisis still existed.

- **Inflation situation**

Inflation remained moderate worldwide from 2009 to 2013. The inflation rate kept a relative stable level in the United States from 2009 to 2013 and was expected to remain below 2% in 2014 and 2015 (Hong, 2014). The Inflation rate had dropped below 1%, which may cause the deflationary. Japan still faced deflation crisis. Among developing countries and economies in transition, there were just several economies whose inflation rates were above 10% throughout South Asia and Africa (Burns, Ransburg, 2013). Overall, most global countries had no the inflation pressure.

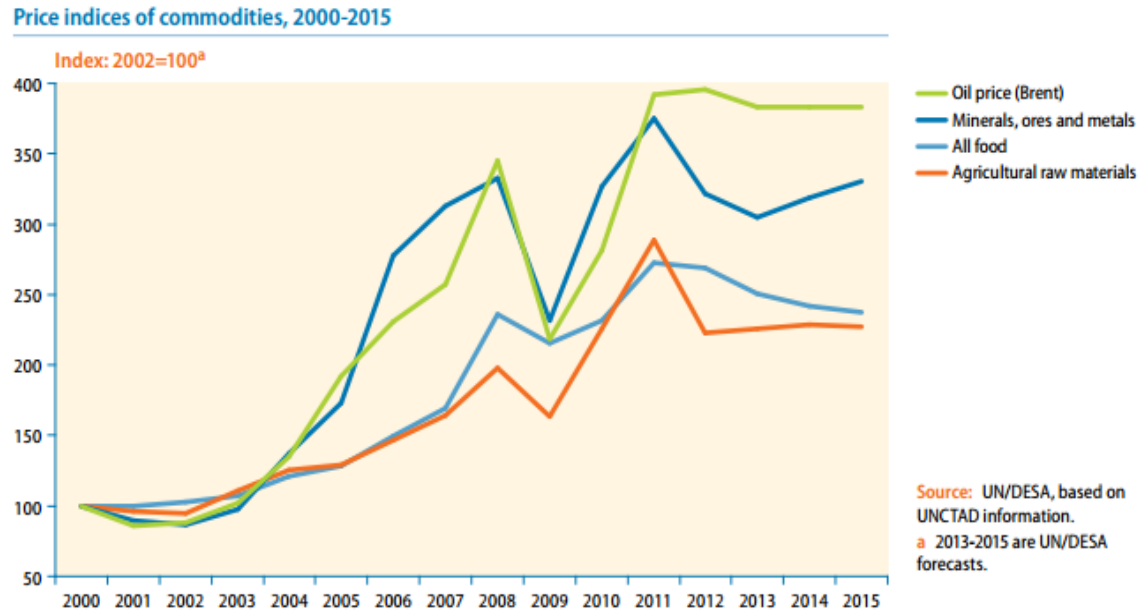
- **International trade**

Global trade had a significant increase from 2009 to 2010 with a about of 12.6% but then the growth rate of global trade dropped from 12.6% in 2010 to 3.2% in 2012. In 2013, global trade growth had a modest rebound and it was expected to be close to its long-term average growth rate of 5% in 2014 according to the World Economic Outlook (WEO) (Burns, Ransburg, 2013).

- **Prices of primary commodities**

Following Figure 3.1 is the prices of primary commodities from 2000 to 2015.

Figure 3.1



Source: <http://www.un.org>

We can see the prices of primary commodities generally had an increase from 2009 to 2011 and then had a slight drop.

The global commodity prices are expected to be stable but still are in a relative high level according to World Economic Outlook.

- **Uncertainties and risks**

According to WESP2014<sup>2</sup>, there are some major uncertainties and risks which would cause a new round of economic recession, namely, debt distress in the euro area, fiscal uncertainties to the high debt ceiling and budget in the United States, and weak emerging economies.

Overall, global economy environment relatively was not optimistic from 2009 to 2013 with a relative low growth rate, higher unemployment rate, a serious of uncertain

<sup>2</sup> WESP 2014 is the report which is a joint product of the United Nations Department of Economic and Social Affairs (UN/DESA), the United Nations Conference on Trade and Development (UNCTAD) and the five United Nations regional commissions.

factors and risk. However, we also can find the global economic condition were in improvement.

### 3.2 U.S. economic environment

In 2013, net operating revenues of Coca-Cola Company in the United States were \$19.8 billion, or 42% of total net operating revenues. So after studying the global economic, we mainly focus on analyzing the U.S. economic condition in this section.

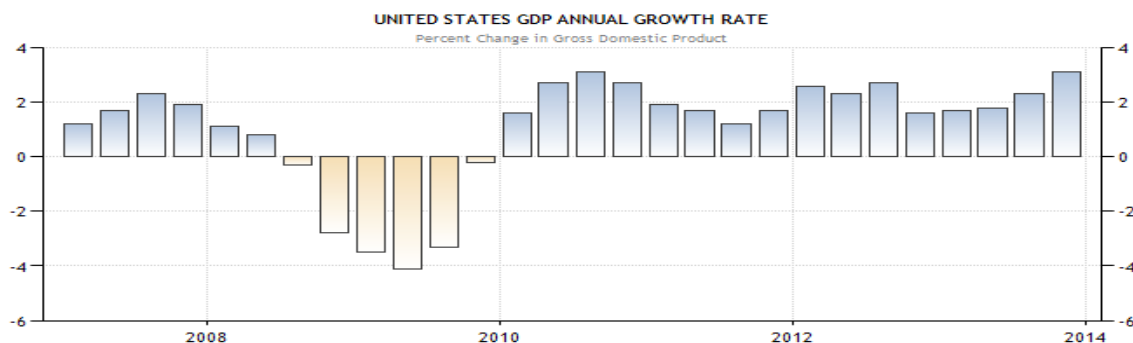
We mainly use some basic economic indicators in U.S. such as gross domestic product (GDP), unemployment rate, inflation rate, interest rates these indicators to analyze the U.S. economy situation and further examine its influence on the whole U.S. stock market and stock price of Coca-Cola Company.

#### 3.2.1 GDP in U.S.

GDP measures the economy's total output of goods and services. In other words, GDP is the monetary value of all the finished goods and services produced within a country's borders in a specific time period (GDP is usually calculated on an annual basis).

GDP is a snapshot of the economy at a certain point in time. GDP is commonly used as an indicator of the economic health of a country, as well as to measure a country's standard of living. Following Figure 3.2 is the U.S. GDP annual growth rate from 2007 to 2013.

Figure 3.2



Source: [www.tradingeconomics.com](http://www.tradingeconomics.com)

From Figure 3.2, we can see the situation of United states GDP from 2007 to 2013. Affected by 2008 financial crisis, United States GDP had a decline from 2008 to 2010. But United States economics had been in a state of recovery from 2010. United States GDP had an increase from 2010 to 2014 which is beneficial to the development of the stock market as a whole. However, it was noteworthy that the economic growth rate had been hovering around 2% which also was a threat for the stock market.

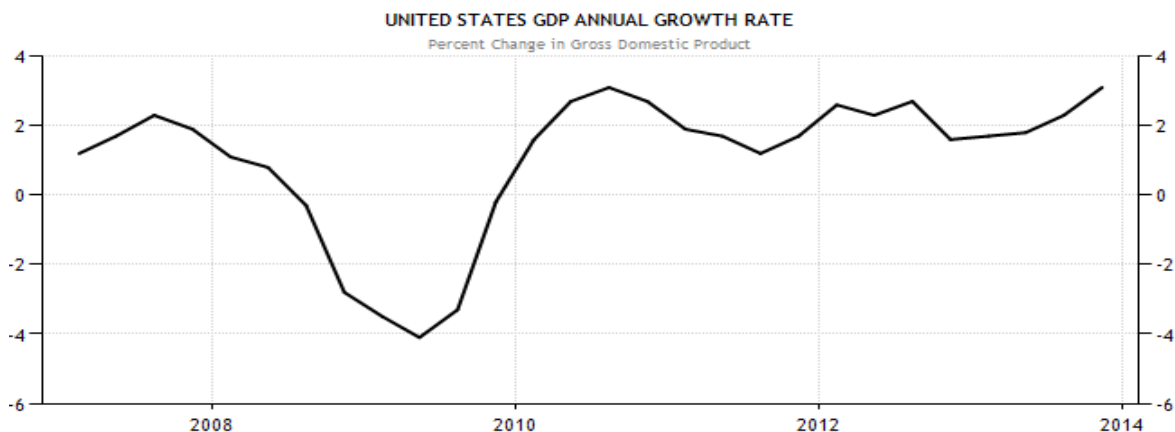
### 3.2.2 Business Cycle in U.S

The business cycle can be expressed as the upward and downward movements of levels of GDP (gross domestic product). Business cycle, as an external macroeconomic economic indicator, it is the important for the company in a market economy. Company can improve its returns by knowing where it is in the business cycle, and adjust its investments to take advantage of the phases.

The business cycle has four phases: Peak, where the GDP growth is the fastest; Contraction, where the economic growth slows, and stocks enter a bear market; Trough, where the GDP growth is negative, signaling recession; Expansion, where the GDP growth is positive, and grows larger.

We use the trend in GDP annual growth rate to analyze the situation of business cycle. Following Figure 3.3 is the U.S. GDP annual growth rate from 2007 to 2013.

*Figure 3.3*



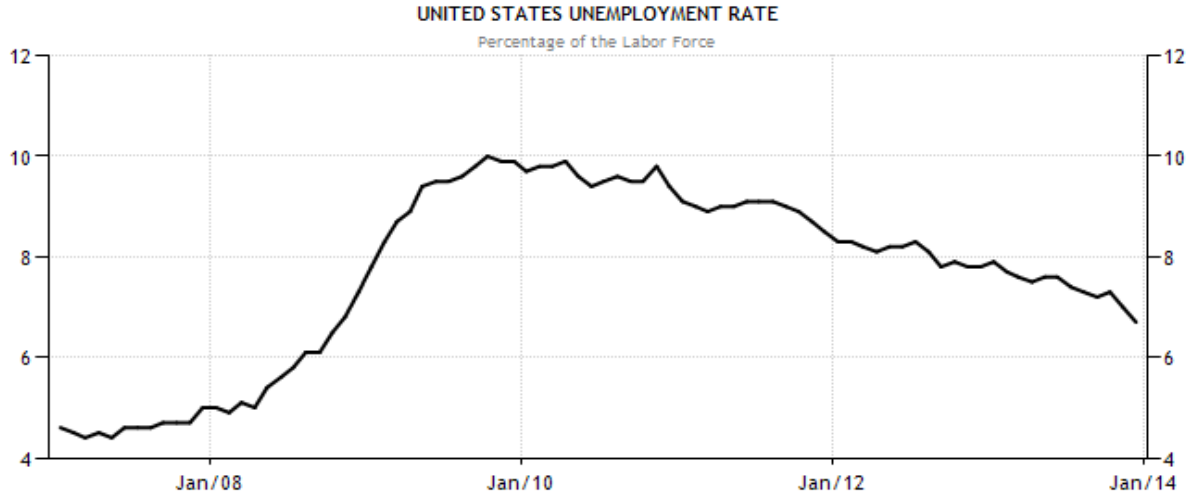
Source: [www.tradingeconomics.com](http://www.tradingeconomics.com)

From U.S. GDP annual growth rate, we can find that U.S. economic had been in a state of contraction from 2008 to 2009 and U.S. economic was in through at the end of 2009. U.S. economic got the expansion from 2010 to 2011 and reached a small peak in 2011. During 2011 and 2013, we can find that U.S. economic had been a slow growth which mean U.S. economic had been in recovery which was conducive to stock market development.

### 3.2.3 Unemployment rate in U.S.

Unemployment rate is the percentage of the total labor force that is unemployed but actively seeking employment and willing to work. Under normal circumstances, reducing unemployment rate means the overall economic are in health and rising unemployment means the economic slowdown a recession. Following Figure 3.4 is the U.S unemployment rate from 2007 to 2013.

*Figure 3.4*



*Source: [www.tradingeconomics.com](http://www.tradingeconomics.com)*

We can see there was a significant rise in the unemployment rate from 2008 to 2010. Although unemployment rate had dropped, it still remained above 6%.

As a whole, high unemployment rate for U.S. which was unfavorable for stock market and would lead to stock price fall.



### 3.2.4 Inflation in U.S.

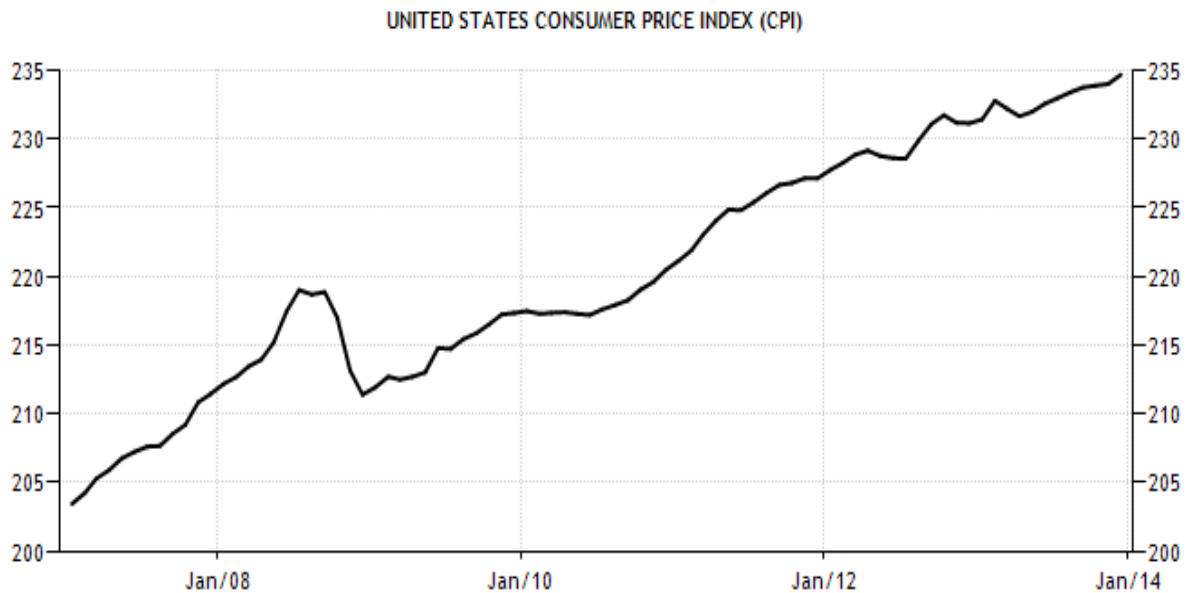
Inflation is a main macroeconomic indicator used to measure the general level of prices in an economy over a period of time.

Inflation is primarily measured by two ways, the consumer price index (CPI) and the GDP deflator.

#### a) Consumer price index (CPI)

A consumer price index (CPI) measures changes in the price level of a market basket of consumer goods and services purchased by households. CPI can explain the level of inflation at a certain level. Following Figure 3.5 is the consumer price index (CPI) in U.S. from 2007 to 2013.

*Figure 3.5*



*Source: [www.tradingeconomics.com](http://www.tradingeconomics.com)*

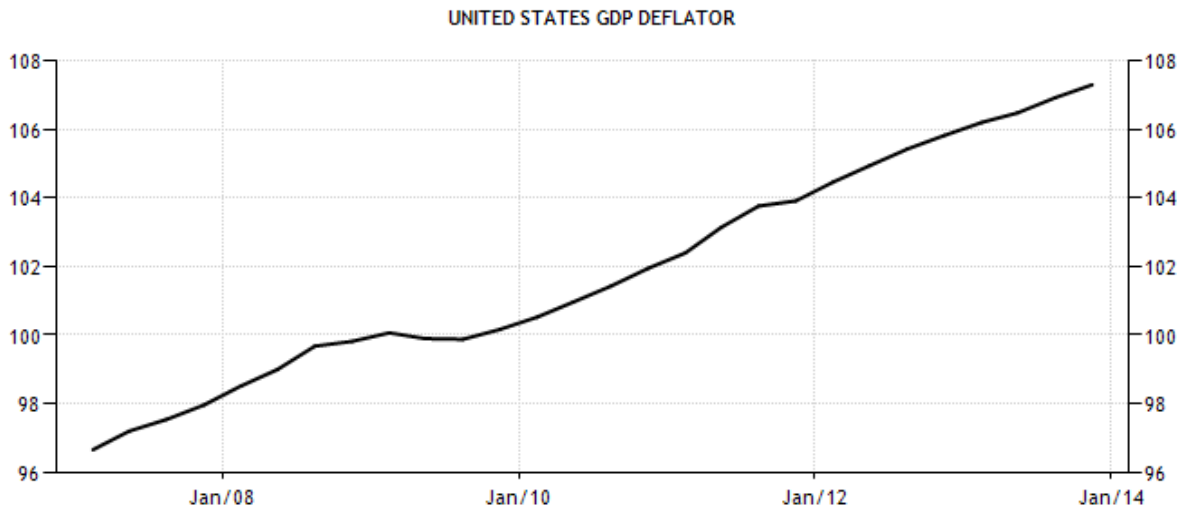
We can see that it had been on an upward trend from 2007 to 2013 apart during 2008 and 2010 in which it had a slight fluctuation. Consumer Price Index (CPI) in the United States reached a high of 235.64 Index Point at the end of 2013 which showed that the U.S. had a high level of inflation.

## b) GDP deflator

GDP deflator, also known as the implicit price index, tracks the cost of all new, domestically produced, final goods and services in an economy relative to the purchasing power. The GDP deflator is the ratio of nominal GDP to real GDP.

Following Figure 3.6 is the GDP deflator in U.S. from 2007 to 2013.

*Figure 3.6*



*Source: [www.tradingeconomics.com](http://www.tradingeconomics.com)*

We can find that GDP inflator in the United States had been increasing and even increased to 107.20 Index Points at the end of 2013 which was a relatively large number. So it was proved once again that the United States was in relatively high level of inflation.

According to U.S. CPI and GDP inflator, we could know United States had a relative high inflation which made investors ask a higher required interest rate and lead to stock price gone down.

### **3.2.5 U.S. dollar value**

The dollar's value refers to the purchasing power of the dollar compared with other currencies, or the exchange rate between the two currencies. The dollar's value can affect import and export of one country and even the whole economic situation. We use

trade-weighted US dollar index to measure the dollar's value. The trade-weighted US dollar index, also known as the broad index, is a measure of the value of the United States dollar relative to other world currencies.

Following Figure 3.7 is the Trade Weighted U.S. Dollar Index: Broad from 2009 to 2013.

*Figure 3.7 Trade Weighted U.S. Dollar Index: Broad from 2009 to 2013*



Source: <http://research.stlouisfed.org>

From this Figure 3.7, we can see the trade-weighted US dollar index had been a decline which reflected the US dollar had been depreciating from 2009.

### **3.2.6 Monetary policy in U.S.**

Monetary policy is the process by which the monetary authority of a country controls the supply of money for the purpose of promoting economic growth and stability.

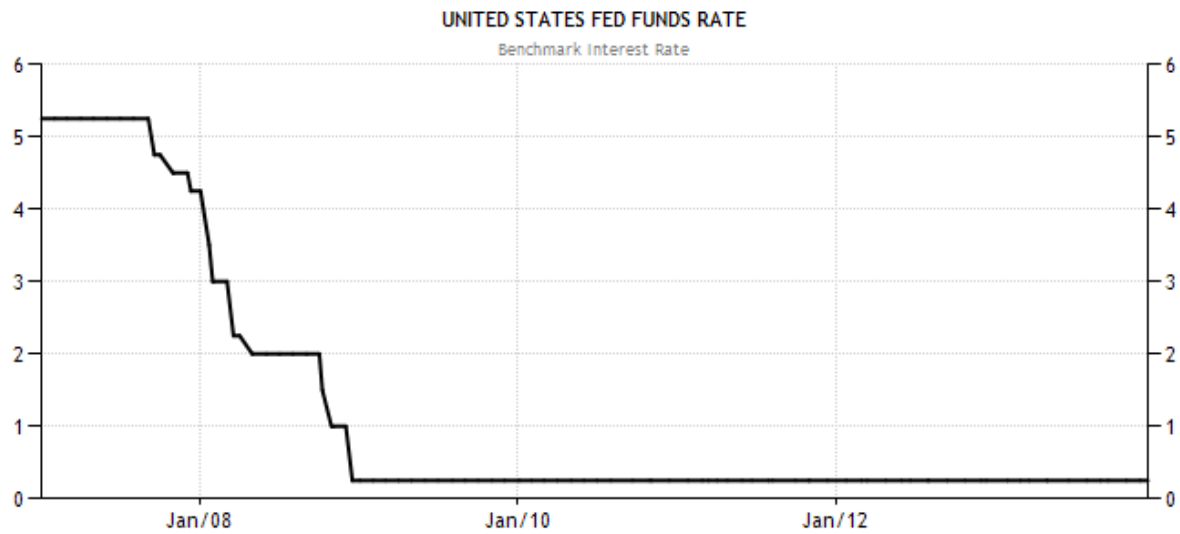
We mainly use the monetary base and Fed Funds Rate these two indicators to measure the United States government monetary policy and further find out the impact monetary policy on the stock value.

### a) Fed Funds Rate

Fed Funds Rate is the target interest rate directly controlled by the Federal Reserve. From the early 2000s, variable U.S. interest rates began to vary along with the Fed funds rates which mean that when the Fed adjusted the federal funds rate, other interest rates would change along with it. Fed Funds Rate acts as the benchmark rates to guide all other interest rates.

Following Figure 3.8 is the Fed Funds Rate in U.S. from 2007 to 2013.

*Figure 3.8*



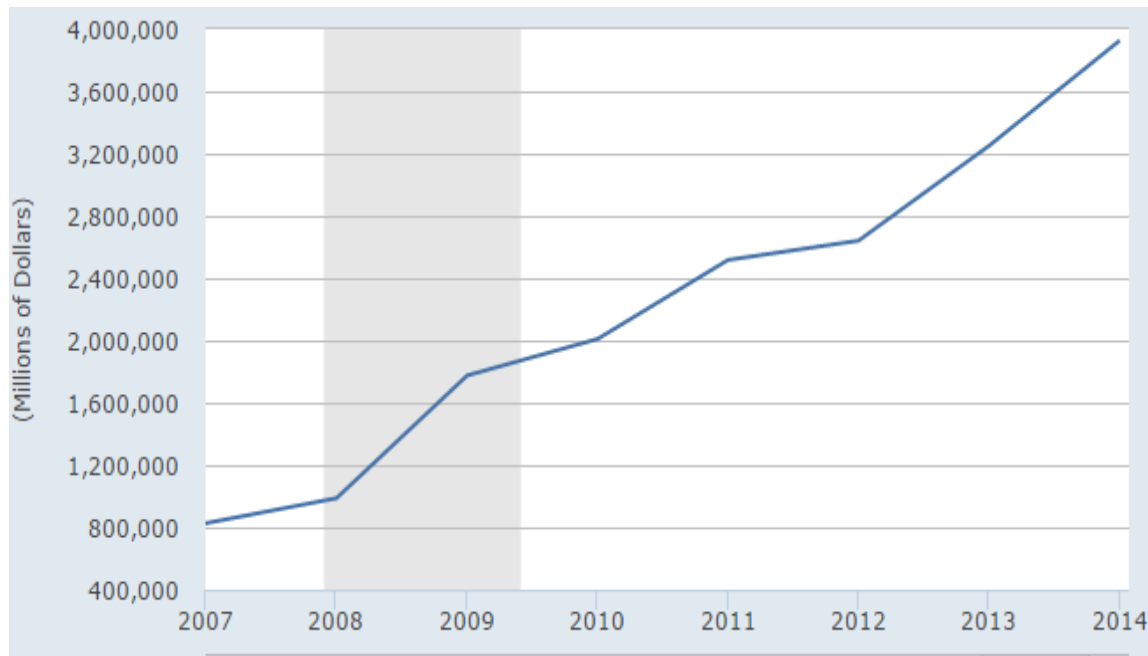
Source: [www.tradingeconomics.com](http://www.tradingeconomics.com)

From Figure 3.8, we can see the Fed cut Fed funds interest rates several times dramatically in 2008. The Fed funds rates reduced from 5.25% in 2007 to close to 0% in January 2009 and then kept stable which show United States government carries out expansion monetary policy which would lead to stock price increase.

### b) Money base

Money base is the total amount of currency held by the public and reserves held by financial institutions with the Federal Reserve Banks which can measure the money supply and reflect the government monetary policy. Following Figure 3.9 is the money base in U.S. from 2007 to 2013.

Figure 3.9 Money base in U.S. from 2007 to 2013



Source: <http://research.stlouisfed.org>

From Figure 3.9, we can see that the money base in U.S. had been in an increase from 2007 especially from 2008. There was a significant increase from 2008 in U.S. money base which even researched 4000 billion U.S. dollars at the end of 2013.

On the whole, lower Fed interest rate and rising money base mean government carry out expansion monetary policy which would lead to stock price increase.

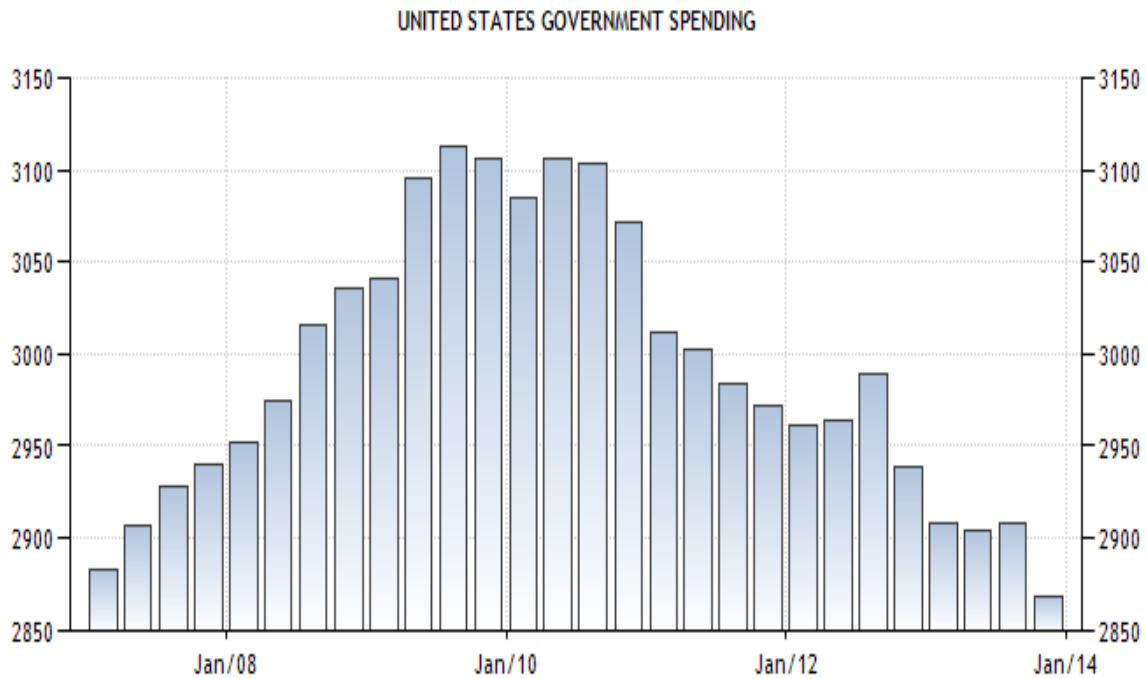
### 3.2.7 Fiscal policy in U.S.

Fiscal policy is the use of government revenue collection (taxation) and expenditure (spending) to influence the economy. The two main instruments of fiscal policy are changes in the level and composition of taxation and government spending.

#### a) Government spending

Government expenditure is used to measure money that a government spends. Following Figure 3.10 is the government spending in U.S. from 2007 to 2013.

Figure 3.10



Source: [www.tradingeconomics.com](http://www.tradingeconomics.com)

We can see that U.S. government spending had a high level of growth from 2007 to 2010 and starting in 2011 it began to decline and drop to 2868.5 USD Billion at the end of 2013.

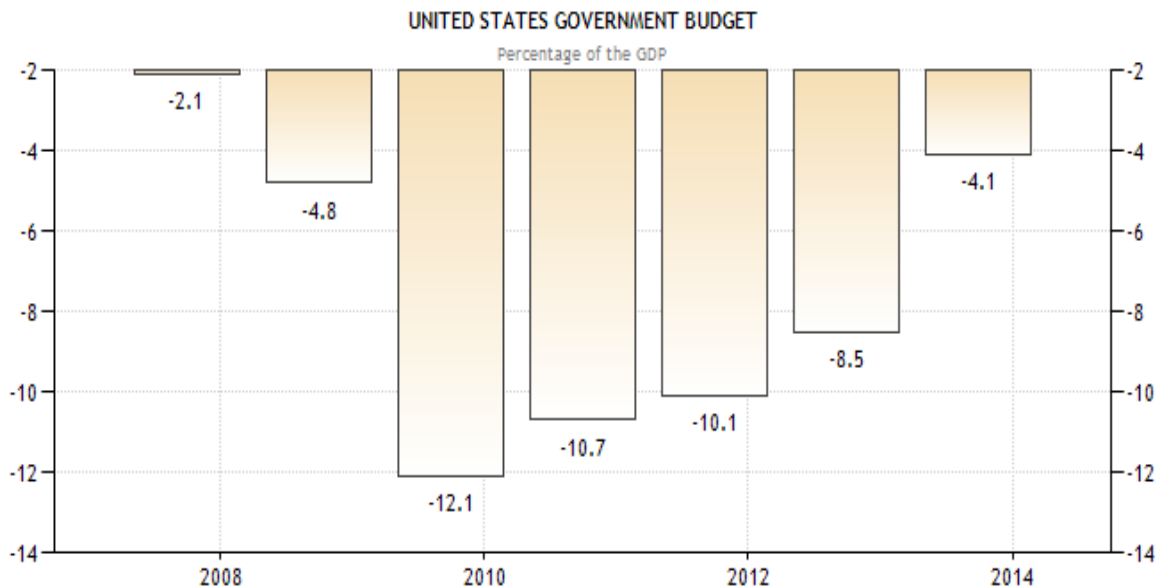
According to fiscal stimulus plan in 2009 and situation of government spending from 2007 to 2013, we can see the U.S government implemented expansionary fiscal policy from 2007 to 2011 and then adjusted the relatively tight fiscal policy.

#### b) Government Budget

The government budget reflects the government's revenues collected and spending for a specific period of time and resulted deficit or surplus of government budget to influence the economic situation.

Following Figure 3.11 shows the government budget to GDP in U.S. from 2007 to 2013.

Figure 3.11



Source: [www.tradingeconomics.com](http://www.tradingeconomics.com)

From Figure 3.11, we can find the government budget to GDP had been negative which mean that the state government has been in deficit from 2007 to 2013. Additionally, the percentage value had a significant increase in 2009 and then began to go down, that is, the government's budget deficit ballooned from 2008 and started narrowing again in 2010. However, we can find the government budget to GDP also remained a relative high level although it declined to -4.1% in 2013.

In summary, every major economic indicator in U.S. was in improvement from 2007 to 2013, but sagging economy growth, high unemployment rate, high inflation rate and relative high fiscal deficit made the United Starts economic situation had enabled the US economy not be optimistic which would influence the stock market development and it is not favorable for the stock price of Coca-Cola Company.

## **4 Industry Analysis of Coca-Cola**

Industry analysis is a market assessment tool providing a macro-guidance for business of a particular industry through analyzing current industry environment. We all know an economy can be divided into different sectors or industries allowing for more in-depth analysis of the economy as a whole such as Consumer Staples sector, Health Care and so all. However, we know there sectors or industries have different development levels which will affect the business of a particular industry development strategy, even the performance of the company. Additionally, the purpose of the thesis is to analyze the equity intrinsic value of Coca-Cola Company, so the industry environment analysis is necessary for analyzing the Coca-Cola Company and further assessing the intrinsic value of Coca-Cola Company stock.

So we focus on the industry environment of Coca-Cola Company such as industry lifecycle, competition environment and so all in this section.

We divide four parts to analyze the company's industry environment. Firstly, we introduce the basic situation of Coca-Cola Company and then position which industry it belongs to. Next we analyze industry life cycle to have knowledge of the current situation of the company-owned industry. Finally, we use Porter five forces analysis model to measure the company-owned industry competitive environment.

### **4.1 Company profile of Coca-Cola**

The Coca-Cola Company was founded in 1886 and currently it is headquartered in Atlanta, Georgia in the United States. The stocks of Coca-Cola Company are traded on New York Stock Exchange. The Coca-Cola Company is the world's largest beverage company which owns more than 500 nonalcoholic beverage brands, 3,000 different beverage products and has the 48% market share in the global in 2013. It manufactures and distributes various nonalcoholic beverages worldwide.

The Coca-Cola Company not only focuses on the carbonated drinks, but also other numerous valuable beverages such as waters, enhanced waters, juices and juice drinks,

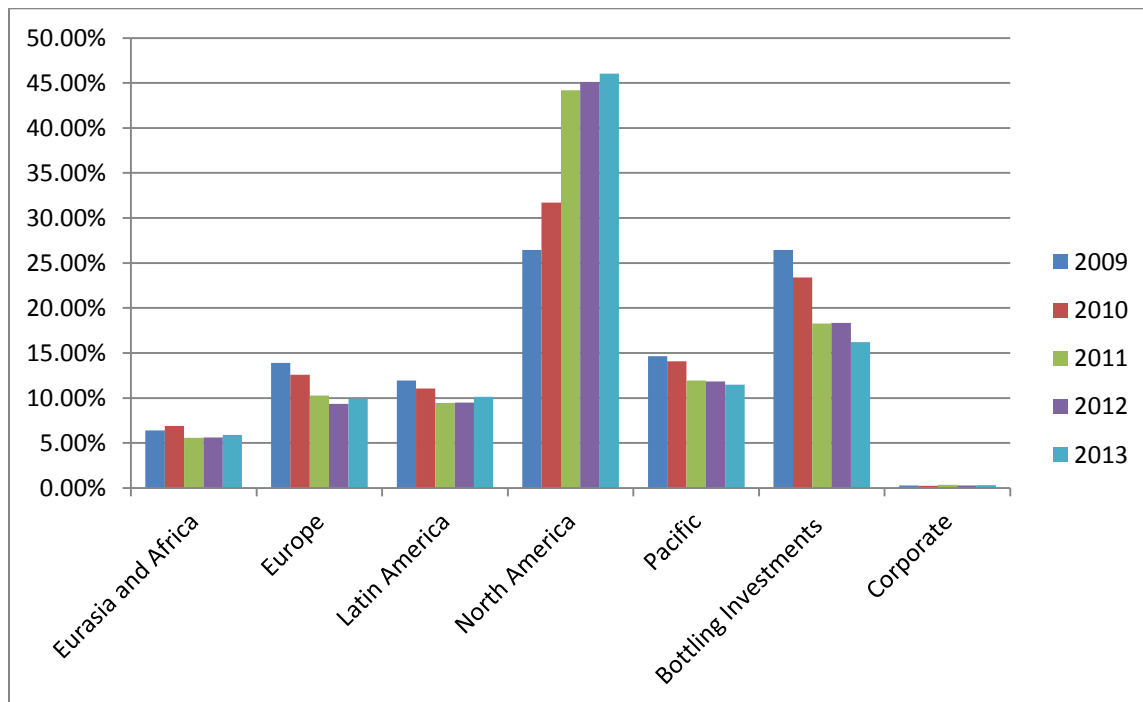


ready-to-drink teas and coffees, and energy and sports drinks. But carbonated drinks are company primary products although the company has been expanding into the non-CSD category in response to a shift in consumer demand and a greater emphasis on healthy options. Company annual report data shows 77% of the Company's products are belonged to carbonated soft drinks. Additionally, Coca-Cola, Diet Coke, Fanta and Sprite these four carbonated drink brands are its main profitable brands.

The company offers its beverage products through a network of company-owned or controlled bottling and distribution operators, as well as independent bottling partners, distributors, wholesalers, and retailers.

The Company's segments include Eurasia and Africa, Europe, Latin America, North America, Pacific, Bottling Investments and Corporate. The North American and bottling investment are its main area of revenue sources. The following Figure 4.1 can better illustrate its situation of revenue distribution by operating segment.

*Figure 4.1 Revenue distribution share of the Coca-Cola Company worldwide, by operating segment from 2009 to 2013*



Source: [www.coca-colacompany.com](http://www.coca-colacompany.com)

Figure 4.1 illustrates the situation of revenue distribution share of the Coca-Cola Company worldwide based on the operating segment from 2009 to 2013. We can see the largest proportion of total revenue came from the North America market nearly accounting for half total revenues from 2011 which mean the North America market was company main market. In addition, we can see the whole revenues were caught in the decline phase in other segments especially Europe segment and bottling investments segment. There were multifaceted reasons but the most critical reason was growing consumer preference for healthier drinks and increasing saturated markets. We can find the market share was low for Eurasia and Africa segment which primarily was result of the local culture and demand level. With the intense competition and increasing saturated market in the soft drinks industry, Coca-Cola Company should try to meet the needs of consumers, seize the consumer market and expand its market share, particularly in Asia and other segments.

In addition, company is committed to the development of health drinks to respond the increasing consumer preference for healthier drinks and increasing saturated markets. The company launched Coca-Cola Zero with a lower amounts of sugar, calories in 2006 and acquired one of the four Russian juice maker Nidan Juices in 2010 which showed that the company continued to develop the Russian market and expand non-carbonated beverage business.

The goal of company is to become more competitive and to a create value for our shareowners in an accelerated growth way.

## **4.2 Industry classification**

Industry classification attempts to place companies into groups on the basis of commonalities. The purpose of the industrial classification is to explore the company's industry type, laying the groundwork for industry analysis.

In the section, we mainly classify the industry according to the different classification approaches. There are three main approaches the products and services supplied; business-cycle sensitivities and statistical similarities.

According to the products and services supplied, industry can be divided into product and service. We know the Coca-Cola Company is the beverage company which belongs to the product industry.

According to business-cycle sensitivities, companies can be classified by the cyclical industry, neutral industry, defensive industry and growth industry. In addition, cyclical industry means its performance is positively related to the overall economic activities. It mainly includes building industry, car industry, electro technical industry, steel industry and so all. Neutral industry refers that the economic cycle has a small impact on the company's performance. It mainly includes the food industry, medical services, public transport and some sanitary goods and not durable goods. Defensive industry means that the industry performance is negatively correlated with the overall economy. It mainly includes entertainment industry, cable TV, repair shops and so all. Growth industry is characterized by rapid growth in sales and is independent of the business cycle.

The Coca-Cola Company is the world's largest beverage company which mainly offers carbonated drinks but also includes other numerous valuable beverages such as waters, enhanced waters, juices and juice drinks, ready-to-drink teas and coffees, and energy and sports drinks. According to its business, we can define the Coca-Cola Company as the neutral industry. So we can get the results that the business cycle has a very small impact on the Coca-Cola Company.

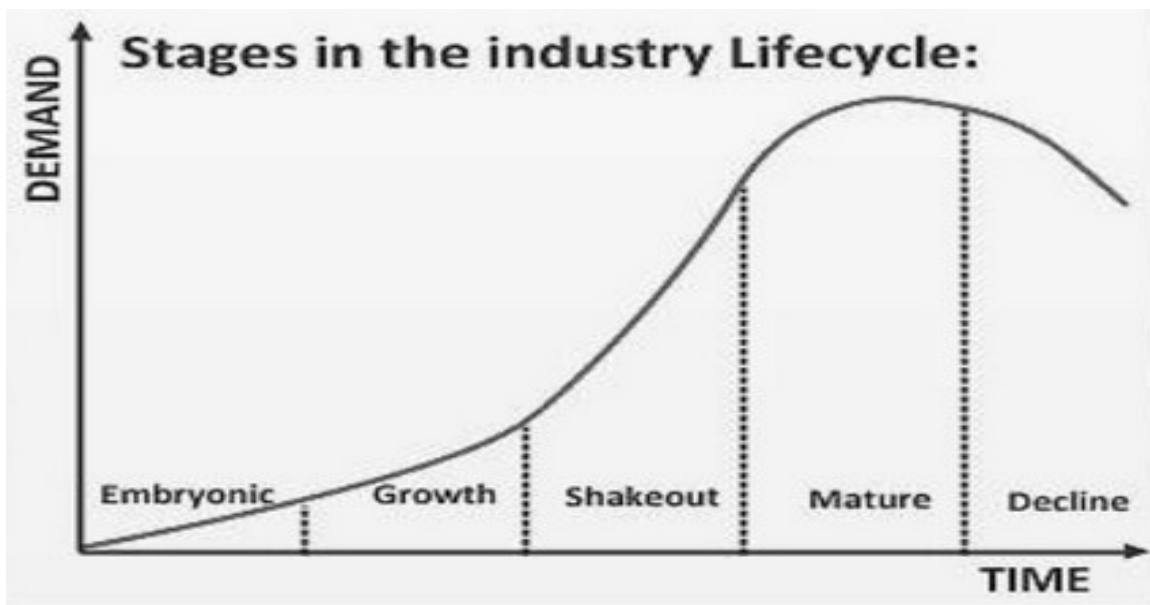
### **4.3 Industry life cycle**

The industry lifecycle is a series of stages of development an industry typically goes through, from the time of embryonic to an eventual decline. The industry lifecycle is very important for industry analysis since industry lifecycle position can influence on the industry competition, growth and profits and so all and further have an impact on the company performance though affect the firm's industry conditions.

The industry lifecycle is also the important component of strategic analysis of an industry. The industry lifecycle generally contains five stages, namely, embryonic, growth, shakeout, maturity and decline.

Figure 4.2 shows the stages as a curve illustrating the level of demand at every stage.

Figure 4.2



Source: <https://www.bloglovin.com>

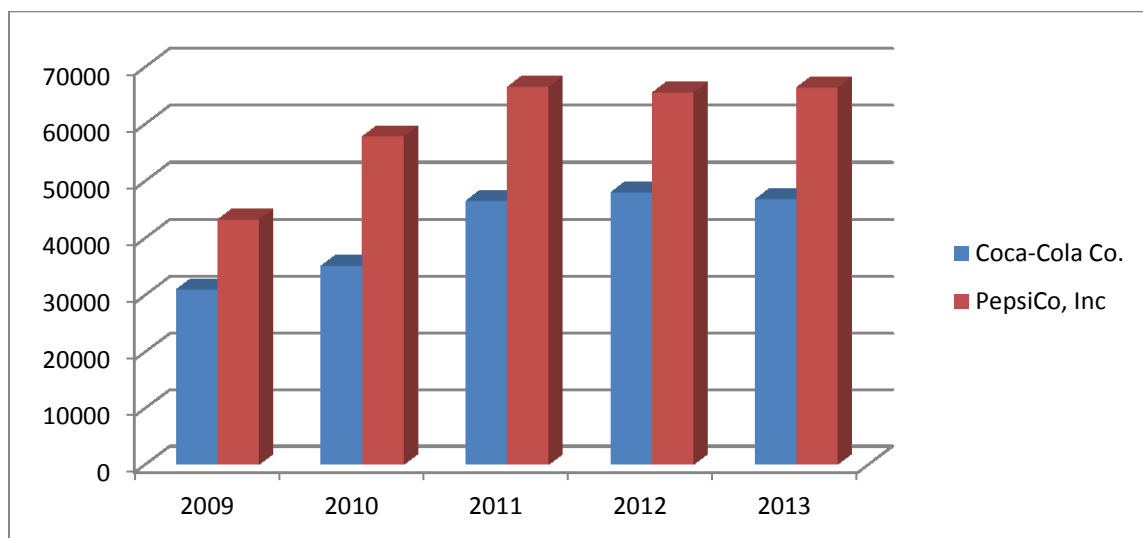
In addition, each stage has its own characteristics. In Embryonic stage, the product is introduced to the market with very little competition prevails, slow growth rate, significant investment and high risk. The key strategic initiatives of companies are mainly to spread product awareness, attract innovators and opinion leaders. In the growth stage, company sales and profits start increasing with rapidly increasing demand, lower competition and relatively low entry barriers. In the shakeout stage, companies have a slowing growth, declining profitability and nearly saturated demand market. During the shakeout stage, the companies increasingly pay attention to reduce the company cost structure and build the brand loyalty. During the mature stage, the product demand market is completely saturated; the industry often consolidates and become oligopolies; and has a high entry barriers. The companies in this stage always have superior products

but the growth rate is little or has a little decline. In this stage the company tries to retain persuade and motivate its buyers to purchase. During the decline stage, industry growth turns less than the overall economic, or it might even shrink and the competition increases. At this stage, the company's strategy is that retain company customers, cut back the goods least demanded and try to revive the product through innovation or to cut back its supply.

Coca-Cola Company, as the world's largest beverage company, it owns more than 500 nonalcoholic beverage brands. The company offers carbonated drinks and other numerous non-carbonated beverages such as waters, enhanced waters, juices and juice drinks, ready-to-drink teas and coffees, and sports drinks. But we know the carbonated beverage is company's main product and company revenues are mainly come from carbonated beverage. So we primary analyze the carbonated beverage industry.

Firstly, we analyze state of industry growth. We all know Coca-Cola Co. and PepsiCo are global key players in the nonalcoholic beverage industry especially in carbonated beverage industry which dominate global carbonated beverage markets. So we analyze state of industry growth by measuring the growth of Coca-Cola Co. and PepsiCo. Following Figure 4.3 describes the revenues of two giants and the change trend.

*Figure 4.3 Revenues of Coca-Cola Co. and PepsiCo from 2009 to 2013 (in million \$)*



*Source: [www.coca-colacompany.com](http://www.coca-colacompany.com) and [www.pepsico.com](http://www.pepsico.com)*

From Figure 4.3, we can see the revenues of Coca-Cola Co. and PepsiCo maintained at the same level from 2011. Growth rate of revenues began to decline from 2009 and until the beginning of 2011 it kept at a steady low level even had a slight decline which indirectly reflected the revenues growth of entire carbonate industry began to fall to a stable low level even had a slight decline.

Secondly, technology in the carbonated beverage industry has been very mature regardless of the production or the distribution channels. We know that as giant manufacturers, Coca-Cola Co. and PepsiCo have been competing for centuries. The Coca-Cola Company was founded in 1886 and Pepsi-Cola was created in the late 1890s and they had their own mature distribution channels. In addition, we know there are many small local carbonated beverage manufacturers except the large well-known international manufacturers in the world.

Thirdly, a few large manufacturers monopolize the industry and each vendor has a certain proportion of the market share which generally doesn't have a large extent change. Additionally, Competition means have a change which gradually shifts from a variety of non-price means from price competition means such as improving the quality, improving properties and strengthening after-sales service, etc. between manufacturers. Coca-Cola Co. and PepsiCo these two major carbonated beverage industry manufacturers have dominated the carbonated beverage industry and they are also the strongest contenders for each other. They own nearly 70 percent of global market share and they also have hundreds of years of competition. But we know their competition means has been changing from price means to the non-price measures such as packaging innovation, sales channels innovation and so on.

Fourthly, there are very high barriers to entry in the carbonated beverage industry. Firstly,

We know Coca-Cola Co. and PepsiCo these two large carbonated beverage industry manufacturers have dominated the carbonated beverage industry with strong brand name, superior distribution channels, large global market shares and so on which

set the barriers for new manufacturers to entry. In addition, carbonated beverage industry asks for high fix and variable costs at the end of activity which set the fund barriers to enter for new manufacturers. Moreover, the production, distribution and sale are subject to numerous statutes and regulations if new manufacturers want to go out the domestic market. These factors together set the very high barriers for new manufacturers to entry in the carbonated beverage industry

Additionally, consumer characteristics are very clear and stable and the buyer's market has been formed in the carbonated beverage industry. Every carbonated beverage industry manufacturer enjoys having one of the most loyal consumer groups.

Finally, many members of the industry endeavor to diversify their products to better compete and gain share. Additionally, they may pursue lucrative distribution arrangements or acquisitions to expand their operations, product portfolios, and geographic reach. Like Coca-Cola Company, it acquired several companies and brands to expand their operations and gain market shares. In 2007, Company acquired Fuze Beverage and North American business of Coca-Cola Enterprises in 2010.

According to above industry characteristics, we can define the carbonate industry in the mature stage of the industry lifecycle.

In addition, as more and more consumers are concerned about the health issues and obesity problems, we know consumer preferences began to change from regular carbonated beverage with high-sugar to the low-sugar or sugar-substitute drinks and other healthier products such as bottle water, sports drink, tea, coffee, vegetables and fruit juices and so all which make carbonated beverages facing a small transition that carbonated beverage industry manufacturers more pay attention on the non-carbonated beverages market and product diversification.

#### **4.4 Industry strategic analysis**

Strategic analysis is extremely critical in industry analysis since it mainly focuses on analyzing industry competitive environment which can provide guidance on corporate

strategy development. Moreover, Porter five forces analysis model is the one of earliest and common model in strategic analysis used to examine industry competitive environment and industry attractiveness (Chisholm, 2007).

So we use Porter five forces analysis model to examine the non-alcoholic beverage industry especially carbonated beverage industry competitive environment and further understand the Coca-Cola Company current industry conditions in this section.

Porter five forces contains five basic competitive forces: Threat of new entrants, Threat of substitute products or services, Bargaining power of customers (buyers), Bargaining power of suppliers and Intensity of competitive rivalry. They are as shown in Figure 4.4.

*Figure 4.4 Porter five forces analysis model*



*Source: <http://commons.wikimedia.org>*

- **Threat of new entrants**

The carbonated beverage industry has no the strong competitive pressure from new entrants. We all know Coca-Cola Company (KO) and PepsiCo, Inc. (PEP) have



dominated in the carbonated beverage industry. They have the high market shares, large brand, large loyal consumer groups and extensive beverage bottling distribution network. For example, Coca-Cola Company and PepsiCo, Inc. have about 70% market share in U.S. carbonated soft drink market according to Beverage Digest. Additionally, both companies have a wide geographic presence in more than 200 countries which mean new entrants are subject to numerous environmental laws and regulations. These factors would be difficult for a new company to enter the carbonated beverage industry and compete with the two carbonated beverage industry manufacturers. Overall, the threat coming from new competitor is low in non-alcoholic beverage industry.

- **Intensity of rivalry among incumbent companies**

We all know the carbonated beverage industry is a highly competitive industry due to universal and to number of competitors. Firstly, we know the Coca-Cola Company (KO) and PepsiCo, Inc. (PEP) which are two behemoths in the carbonated beverage industry. These two major companies have dominated the carbonated beverage industry but they are also the strongest contenders for each other. Secondly, some larger international carbonated beverage companies such as Dr Pepper Snapple Group, Inc. (DPS), Monster Beverage Corporation (MNST), and Cott Corporation (COT) also the strong competitors. The other incumbent companies competition come from the Local carbonated beverage companies. For instance, in China, Hangzhou Jianlibao Group Co., Ltd., Hangzhou Wahaha Group Co., Ltd and Henan Zhongwo Beverage Co., Ltd. those are the competitive local carbonated beverage companies. Overall, the rivalry among existing Firms is high.

- **Threats of substitute products**

We all know more and more people start to pay attention the health concerns. The consumer preferences begin to shift toward healthier products such as bottle water, sports drink, tea, coffee, vegetables and fruit juices and so all. Additionally, carbonated soft drink makers have faced severe criticism from health officials, governments, and communities alike for the side-effects of sugar and other ingredients present in

carbonated drinks. These factors lead to the sales in carbonated soft drinks had a decline on the whole. However, the demand in ready-to-drink (or NARTD) such as bottle water, tea, coffee and fruits juices had an increase. Especially, it would be projected to grow at a compounded annual growth rate of 5% between 2014 and 2017. So the threats coming from substitute products especially ready-to-drink (or NARTD) is very strong.

- **Bargaining power of Buyers**

The buyer of Coca-Cola and other carbonated drink mainly come from the larger grocers, discount stores and restaurants. The soft drinks companies generally firstly distribute the beverages to these stores and then resale to the consumers. But we all know the final buyers are consumers.

So we need to analyze the bargaining power of these stores and consumers. For larger grocers and discount stores, they have the strong bargaining power because they usually buy large volumes of soft drinks. Restaurants have less bargaining power because they don't order in large volume. For the consumers, the bargaining power could start to increase due to decreasing demand which principally soft drink consumers are moving their consumption from regular carbonated beverage with high-calorie to low-calorie carbonates, bottled water, sport drink, juice and tea. So, the bargaining power is strong for buyers in carbonated beverage industry.

- **Bargaining Power of Suppliers**

We all know the water, nutritive and non-nutritive sweeteners are the principal raw materials for carbonates beverage. So we principally need to analyze the bargaining power of water, nutritive and non-nutritive sweeteners suppliers. Additionally, bottles suppliers and distributors should also be the main consideration.

Water is a limited natural resource in some areas of the world, but it generally not subjects to supply constraints due to the resources universality. So we can know there is a low bargaining power for water suppliers. In addition, there are numerous sources for nutritive and non-nutritive sweeteners raw materials. For example, in the United States,

the principal nutritive sweetener comes from the high fructose corn syrup, a form of sugar which is available from numerous domestic sources. The nutritive sweetener is mainly from sucrose, another form of sugar, which is also available from numerous sources outside the United States. Aspartame, acesulfame potassium, saccharin, cyclamate and sucralose these are the main ingredient in the non-nutritive sweeteners which also can come from numerous sources. So for the nutritive and non-nutritive sweeteners raw materials suppliers, they have relatively lower bargaining power which mainly because the carbonates beverage companies can purchase these materials through a variety of ways. In addition of these raw materials, the supplies of bottle and distributors are extremely important. But we know, these carbonates beverage companies generally have their own bottle companies or they authorize some companies to produce like Coca-Cola Company and Pepsi Company and they have their own largest distributed network. On the whole, the bargaining power of suppliers is relatively lower.

Summarily, Industry environment for Coca-Cola Company is extremely unstable. This current situation is determined by industry characteristics and external factors. The Coca-Cola Company is the world's largest Non-alcoholic drinks company whose products include carbonated drinks and other numerous non-carbonated drinks but carbonated drinks are their most popular and profitable products. However, we know the carbonated beverage industry is a mature industry in which growth opportunities are few and even a little decline. Additionally, changes in consumer preferences and some other external factors make the industry downturn. These factors lead the Coca-Cola Company industry environment is in the doldrums. However, on the other hand, growing consumer preference and demand for non-carbonated beverages also provide the opportunities for Coca-Cola Company.

However, industry environment is not optimistic for Coca-Cola Company which is unfavorable for company stock prices on the whole.

## **5 Company Analysis of Coca-Cola**

Company analysis is the core parts of the fundamental analysis which can help investors assess the past performance and future prospects of the company. The results of a company analysis helps external parties make business decisions, such as investing or entering a partnership with the analyzed company.

In this chapter, we focus on the company analysis of Coca-Cola Company from 2009 to 2013. Financial analysis methods, some financial equity valuation models and SWOT analysis described by the Chapter II are used in company analysis of Coca-Cola Company.

### **5.1 Financial analysis of Coca-Cola**

We mainly use the financial analysis method to analyze the company's financial health of Coca-Cola Company from 2009 to 2013 in this section.

#### **5.1.1 Common-size analysis of Coca-Cola**

This part mainly is used to analyze the financial statement of Coca-Cola Company by common-size analysis method to have knowledge of financial position of Coca-Cola Company. Common-size analysis method includes two types. There are horizontal common-size analysis and vertical common-size analysis.

##### **a) Horizontal common-size analysis**

Horizontal common-size analysis is the analysis method in which we use the accounts in a given period as the benchmark and restate every account subsequent periods as a percentage of the base period's same account. The purpose is to have knowledge of the patterns in investment and financing and the situation of profitability from 2009 to 2013.

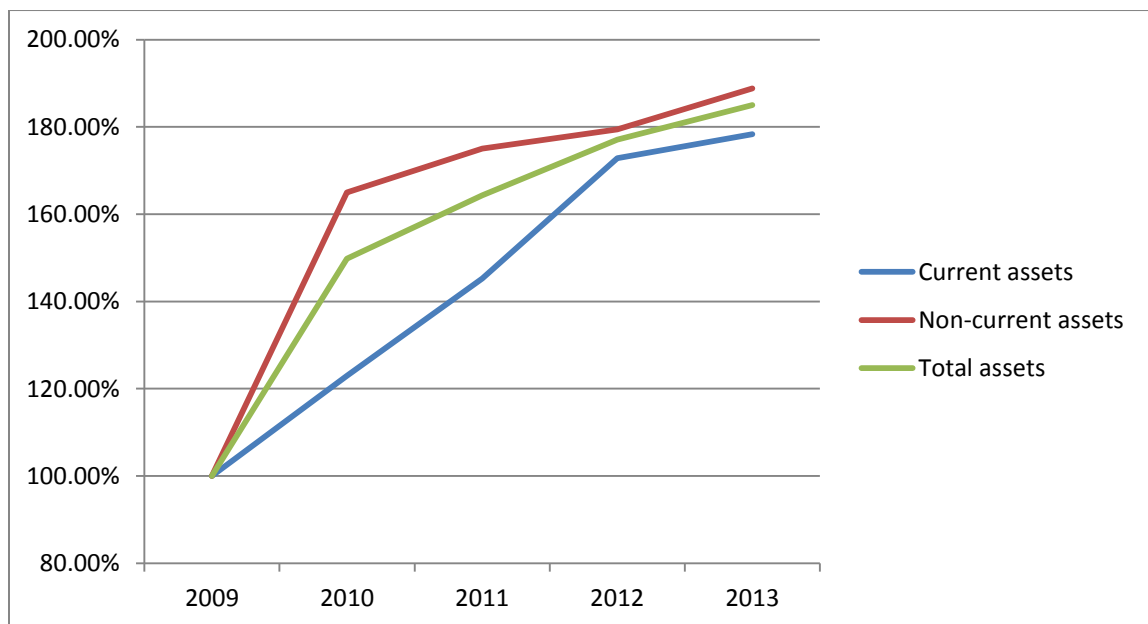
We use the horizontal common-size analysis method to analyze the balance sheet and income statement of Coca-Cola Company from 2009 to 2013. We select 2009 year as

the base year.

*Table 5.1 Horizontal common-size analysis assets of Coca-Cola (2009 as base year)*

Year	2009	2010	2011	2012	2013
Cash and Equivalents	100.00%	121.31%	182.35%	120.24%	148.33%
Marketable Securities	100.00%	128.65%	56.20%	369.94%	449.54%
Receivables	100.00%	117.88%	130.92%	126.64%	129.67%
Inventories	100.00%	112.57%	131.35%	138.66%	139.21%
Total Current Assets	100.00%	122.95%	145.27%	172.80%	178.36%
Property/Plant/Equipment, Total - Gross	100.00%	131.82%	140.59%	142.62%	152.01%
Goodwill, Net	100.00%	276.16%	289.28%	290.13%	291.48%
Intangibles, Net	100.00%	177.17%	179.57%	175.29%	177.81%
Total Non-Current Assets	100.00%	164.98%	175.05%	179.45%	188.79%
Total Assets	100.00%	149.82%	164.32%	177.05%	185.03%

*Figure 5.1 Horizontal common-size analysis assets of Coca-Cola (2009 as base year)*



Based on Table 5.1 and Figure 5.1, we focus on analyzing the usage of assets of Coca-Cola Company from 2009 to 2013.

According to Table 5.1 and Figure 5.1, we can see the total asset had been keeping the growth from 2009 to 2013. Total current assets and total non-current assets had an increase, while the growth rate of non-current assets was higher than current assets.

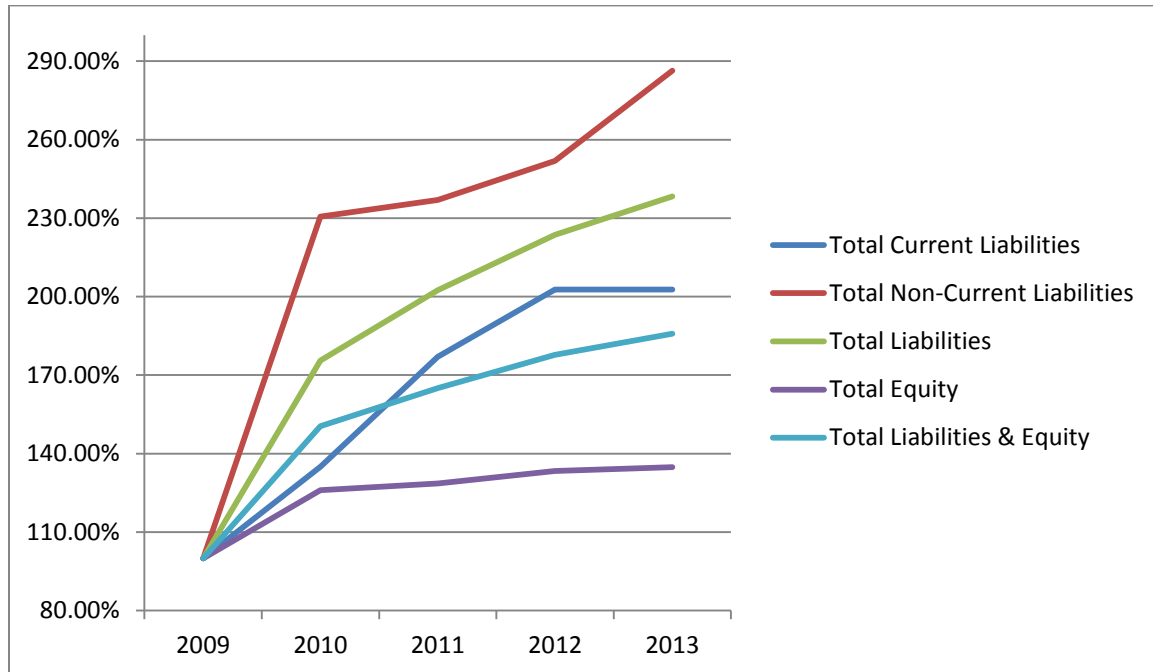
The cash and equivalents item had been in a stable growth from 2009 to 2013 except in 2011 which were mainly because of the increased receipts from customers and proceeds from the net issuances of commercial paper. Marketable Securities had a significant decline due to the maturity of time deposits in 2011. The goodwill and Intangibles these two non-current assets had a dramatically growth from 2010 to 2013 compared with 2009 due to the acquisitions of Great Plains and Honest Tea and acquisition of CCE's North American business in 2010.

As a whole, the assets had an upward trend which was good for company development.

*Table 5.2 Horizontal common-size analysis liabilities and equity of Coca-Cola (2009 as base year)*

Year	2009	2010	2011	2012	2013
Accounts Payable	100.00%	134.30%	140.92%	135.77%	149.80%
Short-Term Debt	100.00%	137.88%	219.29%	262.85%	263.60%
Total Current Liabilities	100.00%	134.89%	176.98%	202.76%	202.69%
Long Term Debt	100.00%	277.54%	269.93%	291.28%	378.61%
Total Non-Current Liabilities	100.00%	230.62%	236.98%	251.83%	286.39%
Total Liabilities	100.00%	175.59%	202.49%	223.63%	238.28%
Total Equity	100.00%	126.03%	128.60%	133.30%	134.86%
Total Liabilities & Equity	100.00%	150.44%	164.99%	177.78%	185.79%

Figure 5.2 Horizontal common-size analysis liabilities and equity of Coca-Cola (2009 as base year)



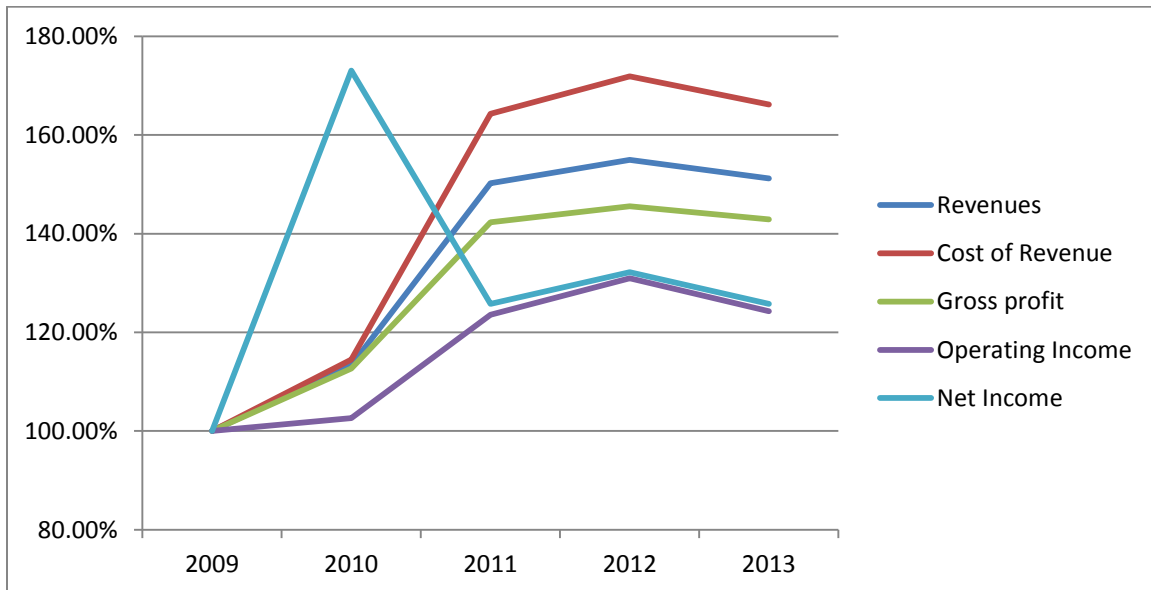
From Table 5.2 and Figure 5.2, we can find the total liabilities and equity increased from 2009 to 2013 which are mainly due to the increase in total liabilities and total equity. We can see both total liabilities and total equity had an increase from 2009 to 2013 but the increase rate in total liabilities is higher than the total equity.

The increase in total liabilities mainly came from the increase of total current liabilities and total non-current liabilities. To acquire the CCE's North American business, company insured some new short and long debts which increased the company total liabilities. As a result of acquisition of CCE's North American business, the Company owns 100 percent of CCE's North American business which made the total equity had an increase.

*Table 5.3 Horizontal common-size analysis income statement of Coca-Cola (2009 as base year)*

Year	2009	2010	2011	2012	2013
Revenues	100.00%	113.32%	150.18%	154.94%	151.19%
Cost of Revenue	100.00%	114.48%	164.28%	171.83%	166.13%
Gross profit	100.00%	112.68%	142.33%	145.53%	142.87%
Operating Income	100.00%	102.65%	123.59%	130.96%	124.26%
Interest income	100.00%	127.31%	193.98%	189.16%	214.46%
Interest expense	100.00%	206.48%	117.46%	111.83%	130.42%
Income before income tax	100.00%	159.21%	128.08%	132.00%	128.29%
Income taxes	100.00%	116.86%	137.84%	133.48%	139.75%
Net Income	100.00%	173.05%	125.79%	132.17%	125.79%

*Figure 5.3 Horizontal common-size analysis income statement of Coca-Cola (2009 as base year)*



From Table 5.3 and Figure 5.3, we can see the change trends of revenues, cost of revenue, gross profit, operating income and net income were consistent from 2009 to



2013 expect net income from 2010 to 2011. There was a slowly increase in 2010 and 2012 but there was a relative significant increase in 2011 for revenues, cost of revenue, gross profit, operating income and net income. The fundamental reason for the above phenomenon was the increase in volume of Company beverage products.

In addition, the change trend in net income had a significant difference in 2010 and 2011. We can see the increase rate in net profit was higher than other income indicators which mainly because company recorded the gain of acquisition of CCE's North American business in the other income which led the net income had a significant increase. Then the increase in interest expenses was the main reason for decrease in net income.

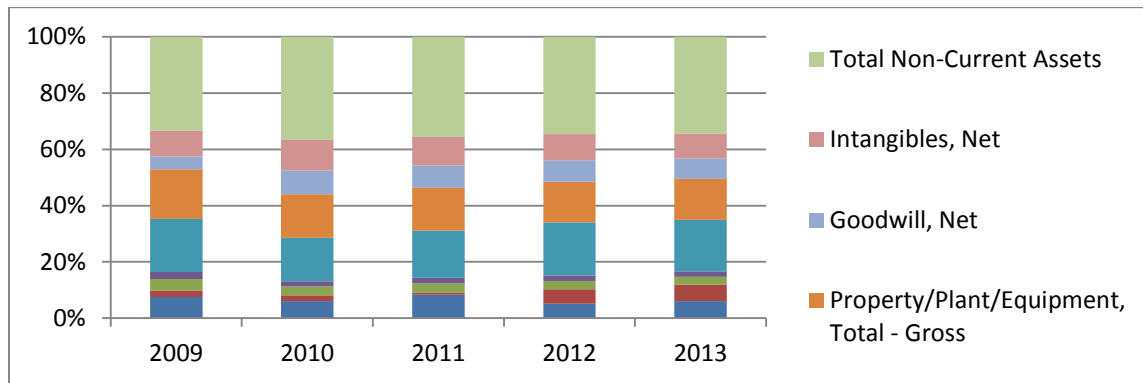
#### b) Vertical common-size analysis

Vertical common-size analysis is used to analyze the income statement and balance sheet of Coca-Cola Company from 2009 to 2013 in this section.

*Table 5.4 Vertical common-size analysis balance sheet of Coca-Cola (% of total assets)*

Year	2009	2010	2011	2012	2013
Cash and Equivalents	14.43%	11.68%	16.01%	9.80%	11.56%
Marketable Securities	4.50%	3.87%	1.54%	9.41%	10.94%
Receivables	7.72%	6.08%	6.15%	5.52%	5.41%
Inventories	4.84%	3.63%	3.87%	3.79%	3.64%
Total Current Assets	36.06%	29.59%	31.88%	35.19%	34.76%
Property/Plant/Equipment, Total - Gross	33.83%	29.77%	28.95%	27.25%	27.80%
Goodwill, Net	8.68%	16.00%	15.28%	14.22%	13.67%
Intangibles, Net	17.68%	20.90%	19.32%	17.50%	16.99%
Total Non-Current Assets	63.94%	70.41%	68.12%	64.81%	65.24%
Total Assets	100.00%	100.00%	100.00%	100.00%	100.00%

Figure 5.4 Vertical common-size analysis balance sheet of Coca-Cola (% of total assets)



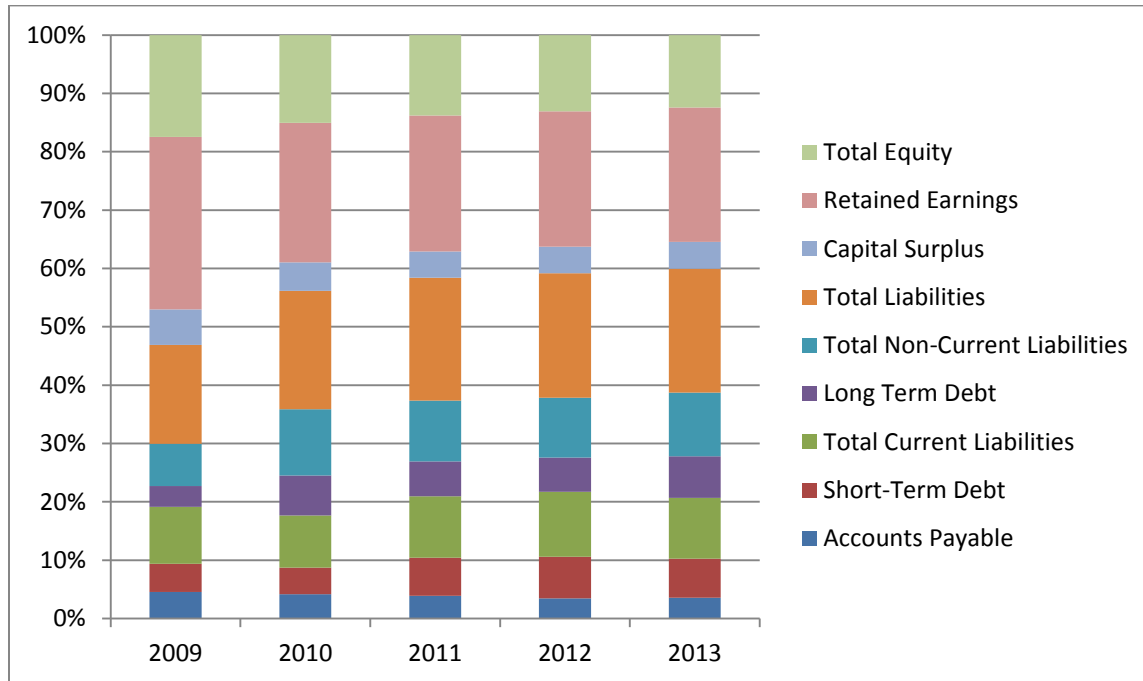
We choose the total assets as the benchmark. Comparing the other accounts in the balance sheet with this benchmark in the same year, we get the Table 5.4 and Figure 5.4.

From Table 5.4 and Figure 5.4, we can see that the proportion of non-current assets had a higher proportion than current assets during 2009 and 2013 in the Coca-Cola Company. In addition, current assets mainly came from cash and equivalents, receivables, marketable Securities and Inventories. Non-current assets were consisting of property, Plant and Equipment, Goodwill and Intangibles. In addition, we can see total non-current asset had a relative significant increase in 2010 which mainly came from the increase in goodwill.

Table 5.5 Vertical common-size analysis balance sheet of Coca-Cola (% equity and liabilities)

Year	2009	2010	2011	2012	2013
Accounts Payable	13.19%	11.77%	11.26%	10.07%	10.63%
Short-Term Debt	14.03%	12.86%	18.65%	20.74%	19.90%
Total Current Liabilities	28.31%	25.38%	30.36%	32.28%	30.88%
Long Term Debt	10.44%	19.26%	17.08%	17.10%	21.27%
Total Non-Current Liabilities	20.94%	32.10%	30.08%	29.66%	32.28%
Total Liabilities	49.25%	57.48%	60.44%	61.95%	63.16%
Common Stocks	1.82%	1.21%	2.20%	2.04%	1.95%
Capital Surplus	17.61%	13.79%	12.92%	13.20%	13.63%
Retained Earnings	85.69%	67.58%	67.05%	67.36%	68.47%
Treasury Stock	-52.18%	-38.07%	-39.14%	-40.63%	-43.41%
Total Equity	50.75%	42.52%	39.56%	38.05%	36.84%
Total Liabilities & Equity	100.00%	100.00%	100.00%	100.00%	100.00%

Figure 5.5 Vertical common-size analysis balance sheet of Coca-Cola (% equity and liabilities)



We select the total equity and liabilities as the benchmark and then compare the other equity and liabilities accounts in the balance sheet with this benchmark in the same year and we can get the Table 5.5 and Figure 5.5.

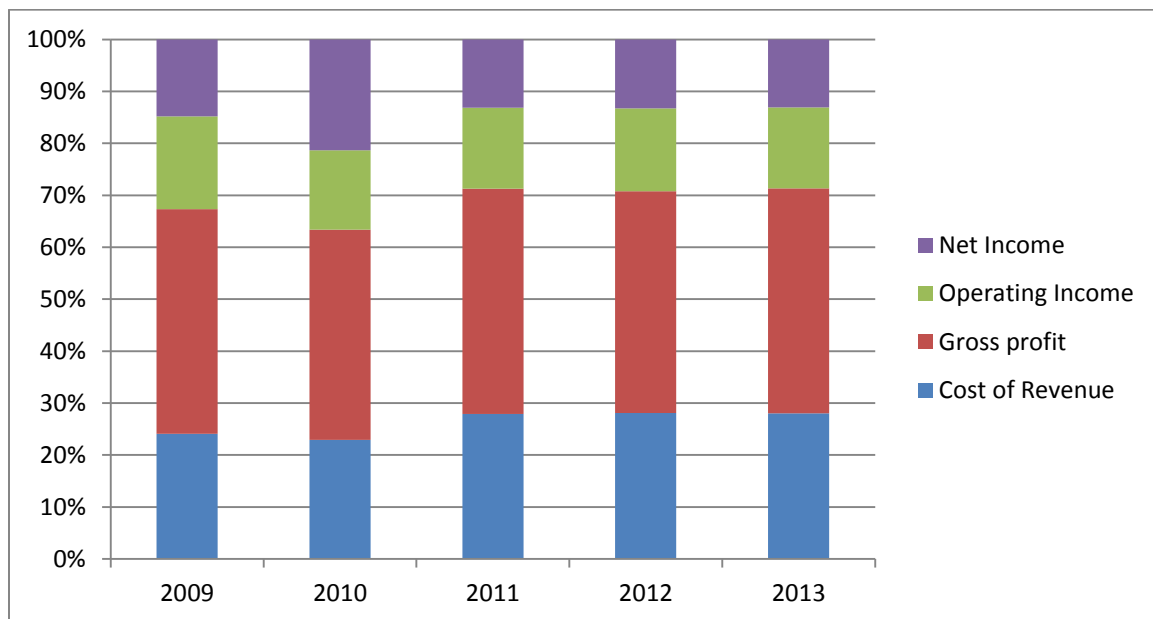
We can see the proportion of liabilities were increasing from 49.25% to 63.16% and proportion of equity was decreasing from 50.75% to 36.84% during these five years which mean the liability was becoming a most important financing way in the Coca-Cola Company's capital structure from 2010.

In addition, the proportion of total non-current liabilities was higher than total current liabilities. Accounts Payable and Short-Term Debt occupied on a larger proportion in company current liabilities. Retained earnings, capital surplus, treasury stock and common stocks were the important parts in company total equity. In addition, we can see the treasury stock had a negative impact in company total non-current liabilities.

*Table 5.6 Vertical common-size analysis income statement of Coca-Cola (% of revenues)*

Year	2009	2010	2011	2012	2013
Revenues	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of Revenue	35.78%	36.14%	39.14%	39.68%	39.32%
Gross profit	64.22%	63.86%	60.86%	60.32%	60.68%
Selling, general and administrative expenses	36.65%	37.47%	37.43%	36.94%	36.94%
Operating Income	26.56%	24.06%	21.86%	22.45%	21.83%
Interest income	0.80%	0.90%	1.04%	0.98%	1.14%
Interest expense	1.15%	2.09%	0.90%	0.83%	0.99%
Equity income (loss) — net	2.52%	2.92%	1.48%	1.71%	1.28%
Other income (loss) — net	0.13%	14.76%	1.14%	0.29%	1.23%
Income before income taxes	28.87%	40.56%	24.62%	24.59%	24.50%
Income taxes	6.58%	6.79%	6.04%	5.67%	6.08%
Net Income	22.02%	33.63%	18.44%	18.78%	18.32%

*Figure 5.6 Vertical common-size analysis income statement of Coca-Cola (% of revenues)*



We select the revenue as the benchmark and compare other accounts in the income statement with the revenues in the same year and then we can get the Table 5.6 and Figure 5.6.

According to Table 5.6 and Figure 5.6, we can find the proportion of gross profit to revenues had a decline from 2009 to 2010 and then it kept a relative stable level from 2011. The operating income showed the similar trend with the gross profit. In addition, we can see the proportion of cost of revenue to revenues was increasing during these five years and had almost the totally opposite trend compared with operating income and gross profit by analyzing the change of proportion of cost of revenue to revenue. So the change in cost of revenue was the main factor for the change in gross profit and the operating income.

In addition, net income was quite high in 2010 and then it kept in the stable level around 20%. The main reason was the increase of other income in 2010, which increased from 0.13% to 14.79%.

Overall, Coca-Cola Company had a good ability of profitability. Although there were the fluctuations in sales volume and revenues for Coca-Cola Company from 2009 to 2013 but it remained a better profitability.

### **5.1.2 Financial ratio analysis of Coca-Cola**

In this chapter, we mainly use the financial ratios analysis methods to analyze the company's financial situation of Coca-Cola Company from 2009 to 2013. Profitability ratios, liquidity ratios, solvency ratios, activity ratios these analysis methods mainly are used in analysis of Coca-Cola Company's financial performance.

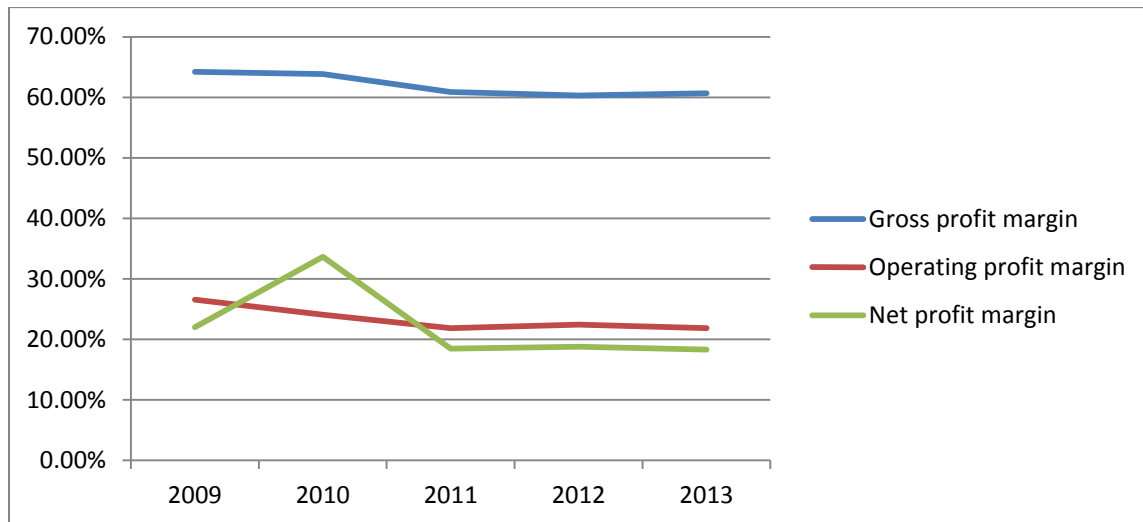
#### **a) Profitability ratios analysis**

Profitability ratios analysis is the financial analysis method which helps us to measure the ability to generate profit from capital in the form of return during a period. We use the profitability ratios analysis method to analyze the profitability position of Coca-Cola Company from 2009 to 2013. Profitability ratios analysis method mainly includes five indicators, namely, gross profit margin, operating profit margin, net profit margin, return on assets (ROA) and return on equity (ROE).

*Table 5.7 Profitability ratios analysis*

Units (Millions of USD)	2009	2010	2011	2012	2013
Gross profit	19,902	22,426	28,327	28,964	28,433
Operating profit	8,231	8,449	10,173	10,779	10,228
Net profit	6,824	11,809	8,584	9,019	8,584
Revenues	30,990	35,119	46,542	48,017	46,854
Gross profit margin	64.22%	63.86%	60.86%	60.32%	60.68%
Operating profit margin	26.56%	24.06%	21.86%	22.45%	21.83%
Net profit margin	22.02%	33.63%	18.44%	18.78%	18.32%

*Figure 5.7 Profitability ratios analysis*



According to Table 5.7 and Figure 5.7, we can see gross profit margin (see formula 2.1) had a decline from 2009 to 2012 especially in 2011 and then had a slight recovery in 2013. Operating profit margin (see formula 2.2) had a decline from 2009 to 2011 especially in 2011. It increased in 2012 and then had a slight decrease in 2013. Net profit margin (see formula 2.3) had an increase from 2009 to 2010 and then it had a significant decrease in 2011. Despite Net profit margin had a small recovery in 2012, it declined in 2013.

Although both revenue and gross profit had a growth, we can see gross profit margin had a decline from 2009 to 2012 especially in 2011. It was mainly because the

growth rate of gross profit was lower than the revenue due to the cost of revenue increasing from 2009 to 2012 especially in 2011. The increase of cost of revenue was primarily due to a significant increase in the cost of raw materials. There was a slight recovery in 2013 mainly because decrease rate of revenue was higher than the gross revenue in 2013.

The reason why operating profit margin had a decline from 2009 to 2011 especially in 2011 was that the operating income decrease from 2009 to 2011 due to the decline of gross profit and increase of operating expenses.

We can see the change trend of net profit margin was different from the change trend of gross profit and operating profit in 2010. Net profit margin had a significant increase in 2010 which primarily because net income had a significant increase due to the remeasurement of our equity investment in CCE to fair value upon the close of acquisition of CCE's North American business in 2010.

*Table 5.8 Profitability ratios analysis*

Units (Millions of USD)	2009	2010	2011	2012	2013
Net profit	6,824	11,809	8,584	9,019	8,584
Total assets	48,671	72,921	79,974	86,174	90,055
Total equity	24,799	31,003	31,635	32,790	33,173
Return on assets(ROA)	14.02%	16.19%	10.73%	10.47%	9.53%
Return on equity(ROE)	27.52%	38.09%	27.13%	27.51%	25.88%

*Figure 5.8 Profitability ratios analysis*

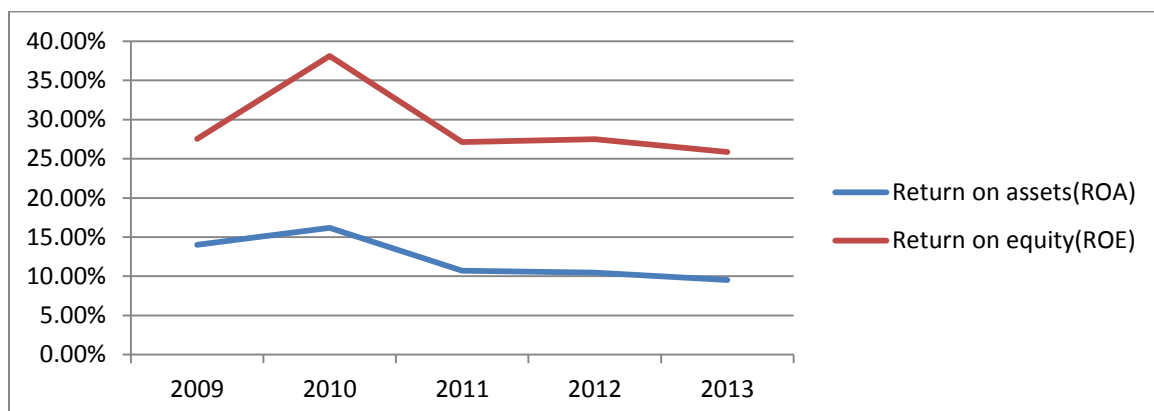


Table 5.8 and Figure 5.8 show us the changes of the return on assets (ROA) (see formula 2.4) and return on equity (ROE) (see formula 2.5). We can see the return on assets (ROA) had an increase from 2009 to 2010 and then it had a decline especially in 2011. Return on equity (ROE) increased 38.09 percent in 2010 from 27.52 percent in 2009 and then had a significant decline in 2011. Although there was a slight increase in 2012, it decreased in 2013.

From Table 5.8, we can see although the net profit and the total assets had an increase, the return on assets (ROA) had an increase which due to the increase rate in net profit is higher than the total assets. The decrease of net profit and increase of total asset made the return on assets (ROA) have a decline from 2011. In addition, we can see the total equity has maintained growth, while return on equity (ROE) had an increase in 2010 and then decreased from 2011 which mainly relied on the change rate in net profit and total equity.

In addition, the significant increase of net profit, total assets and total equity in 2010 directly were related to acquisition of CCE's North American business in 2010. The Coca-Cola Company recorded the gain of acquisition of CCE's North American business directly in the other income which was the main reason why net profit had a significant increase in 2010. As a result of acquisition of CCE's North American business, the Company owned 100 percent of CCE's North American business which made the total equity had an increase. Additionally, the fund of acquisition of CCE's North American business mainly came from the debt which led the total assets had an increase.

Overall, we can see although gross profit margin, operating profit margin, net profit margin, return on assets and return on equity had a decline from 2010, these profitability interactors maintained at a stable and relative higher level. However, we knew the total assets are mainly come from the debt which increases the company operating risk.

As a whole, we can see Coca-Cola Company had a better profitability but higher debt would affect the company profitability.



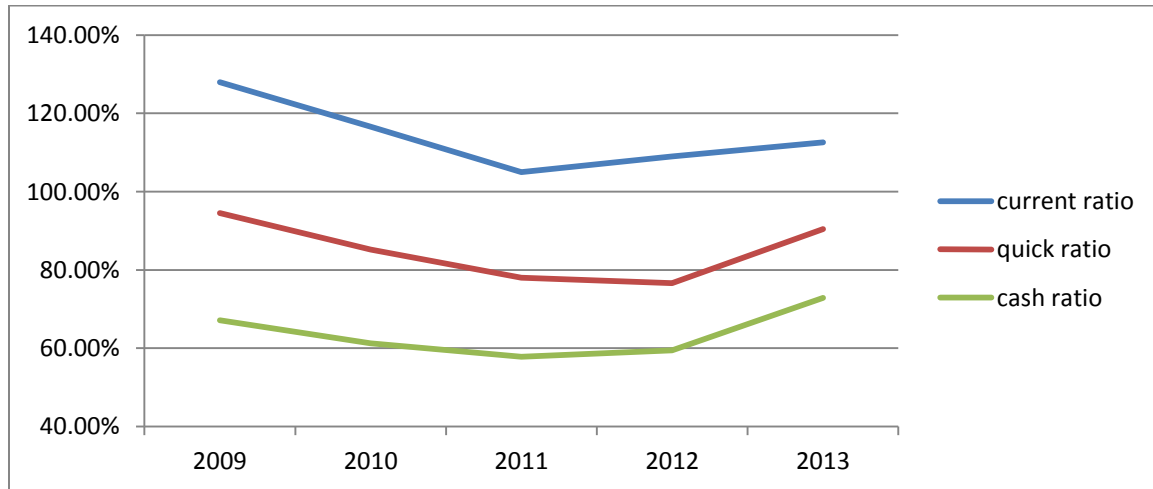
## b) Liquidity analysis

We mainly use liquidity ratios to analyze the ability to meet its short-term liabilities and obligations of Coca-Cola Company in this section. Current ratio, quick ratio and cash ratio are used.

*Table 5.9 Liquidity ratios analysis*

Units (Millions of USD)	2009	2010	2011	2012	2013
Cash	7,021	8,517	12,803	8,442	10,414
Short-term marketable investments	2,192	2,820	1,232	8,109	9,854
Receivables	3,758	4,430	4,920	4,759	4,873
Short-term liabilities	13,721	18,508	24,283	27,821	27,811
Current assets	17,551	21,579	25,497	30,328	31,304
Current ratio	127.91%	116.59%	105.00%	109.01%	112.56%
Quick ratio	94.53%	85.19%	78.06%	76.60%	90.40%
Cash ratio	67.15%	61.25%	57.80%	59.49%	72.88%

*Figure 5.9 Liquidity ratios analysis*



From Table 5.9 and Figure 5.9, we can see current ratio had a decline from 2009 to 2011 and then followed by an upward trend. The current ratio (see formula 2.6) had been maintained at more than 105% from 2009 to 2013. The reason why current ratio was so higher was that the company had relative more the current assets. We can see the

current assets and short-term liabilities were in increase from 2009 to 2013. The company acquired CCE's North American business in 2010 by debt which made the company short-term liabilities increase. In addition, to remain cash from the issuance, company reduced the company's outstanding commercial paper balance and exchanged a certain amount of short-term debt in 2011. The significant increase of short-liabilities made the increase rate is higher the current from 2009 to 2011 which made the current assets had a decline from 2009 to 2011. Then the growth rate in current assets was higher than the short-liabilities which made the current ratio kept the upward trend.

Quick ratio (see formula 2.7) is the analysis method which measures the liquidity of a company by calculating the ratio between all assets which quickly converts into cash and current liabilities. Compared with current ratio, it doesn't include the inventory. We can see the quick ratio had a decline from 2009 to 2012 and then had a significant increase in 2013. The reason of change in quick ratio was similar with the reason of current ratio excluding the impact of inventories.

Cash ratio (see formula 2.8) is a ratio of corporate cash (cash and cash equivalents) to current liabilities. It just measures the proportion of cash and short-term marketable investment in short-term liabilities. Cash ratio decreased from 2009 to 2011 which was primarily attributable to the increase of short-term liabilities. Company issued the short-debt which led the increase change rate in short-term liabilities were higher than the cash and short-term marketable investment. From 2011, company reduced the Company's outstanding commercial paper balance and exchanges a certain amount of short-term debt in 2011 to increase the cash which made increase rate in the cash and short-term marketable investment is higher than the short-term liabilities. So we can see the cash ratio had an increase from 2011.

As a whole, current ratio, quick ratio and cash ratio kept a higher level. We can see current ratio, quick ratio and cash ratio respectively reached 105%, 76%, 50% which mean that the company had enough ability to meet its immediate and short-term obligation. However, higher current asset mean enterprise current asset had no getting the reasonable use.

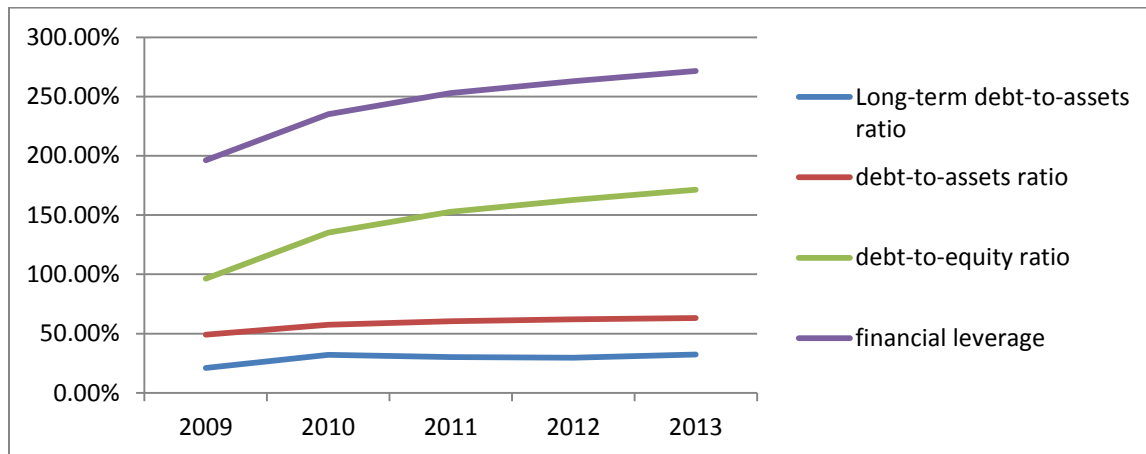
### c) Solvency analysis

Solvency ability is closely related with the company's operational risk and this ability directly relates to the Company's operation status. We use solvency analysis method to analyze the ability of Coca-Cola Company to meet its long-term liabilities to further study the financial position of Coca-Cola Company.

*Table 5.10 Solvency ratios analysis*

Units (Millions of USD)	2009	2010	2011	2012	2013
Long term debt	10,151	23,410	24,056	25,563	29,071
Total debt	23,872	41,918	48,339	53,384	56,882
Total equity	24,799	31,003	31,635	32,790	33,173
Total assets	48,671	72,921	79,974	86,174	90,055
Long-term debt-to-assets	20.86%	32.10%	30.08%	29.66%	32.28%
Debt-to-assets ratio	49.05%	57.48%	60.44%	61.95%	63.16%
Debt-to-equity ratio	96.26%	135.21%	152.80%	162.81%	171.47%
Financial leverage	196.26%	235.21%	252.80%	262.81%	271.47%

*Figure 5.10 Solvency ratios analysis*



From Table 5.10 and Figure 5.10, we can figure out that long-term debt-to-assets (see formula 2.10) ratio was relative low in 2009 and stayed in the stable level during 2010 and 2013. That was because the long term debt in 2009 was really low compared with other years.

These situations influenced the total debt and further affected the debt to assets ratio (see formula 2.9) and debt to equity ratio (see formula 2.11). We can find the debt to assets ratio and debt to equity ratio had a similar change trend with the long-term debt-to-assets ratio. The difference was that the trend of debt to equity ratio was quite sharper compared with two ratios we mentioned. The main reason was that the assets were changed as the debt changed but not for equity. So debt to equity ratio was increasing fast during these years. For the financial leverage (see formula 4.12), it had almost the same trend as debt to equity ratio and also increased in a fast way. In addition, we can find the total debt was more than the total equity from 2010 which mean the debt was becoming the core financing way and higher debt level increased the operational risk.

As a whole, although the company had sufficient assets to meet the company's long-term debt, the company's operational risk is relatively larger.

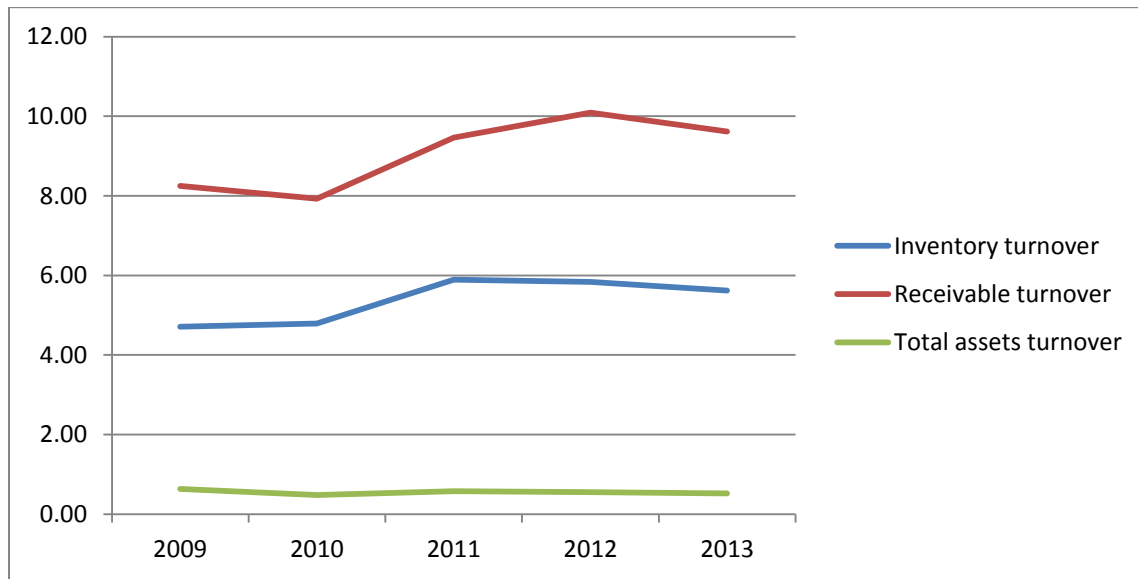
#### d) Activity analysis

This section mainly applies activity ratios to analyze asset utilization situation of Coca-Cola Company from 2009 to 2013. Inventory turnover, receivable turnover and total assets turnover respectively were used to analyze inventory, accounts receivable and total assets utilization.

*Table 5.11 Activity ratios analysis*

Units (Millions of USD)	2009	2010	2011	2012	2013
Cost of goods sold	11,088	12,693	18,215	19,053	18,421
Average inventories	2,354	2,650	3,092	3,264	3,277
Average receivables	3,758	4,430	4,920	4,759	4,873
Revenue	30,990	35,119	46,542	48,017	46,854
Total assets	48,671	72,921	79,974	86,174	90,055
Inventory turnover	4.71	4.79	5.89	5.84	5.62
Receivable turnover	8.25	7.93	9.46	10.09	9.62
Total assets turnover	0.64	0.48	0.58	0.56	0.52

Figure 5.11 Activity ratios analysis



From Table 5.11 and Figure 5.11, we can find inventory turnover (see formula 2.13) remained almost at the same level from 2009 to 2010 and it sharply increased from 4.79 to 5.89 in 2011. Then inventory turnover had a slight decline from 2012. Receivable turnover (see formula 2.14) was stable around 8 and increased to 9.46 in 2011 and stayed at the stable level during 2011 and 2013. From view of total assets turnover (see formula 2.15), this ratio was quite stable from 2009 to 2013 which remained above 0.55.

The increase in inventory turnover mainly was attributed to the increase in cost of revenue in 2011. Cost of revenue increased due to the increase in sales. The significant increase of receivable turnover in 2011 also primarily was attributed to the change in revenue.

As a whole, inventory turnover kept a relative stable level which was almost round 5.5 which was reasonable for nonalcoholic beverage manufacturer. The relative higher receivable turnover and assets turnover mean the higher liquidity and higher efficiency of asset utilization.

Generally, the company had a better financial situation with good profitability, higher liquidity and higher efficiency of asset utilization, but high debt would affect company's probability and increase the company's operational risk.

## **5.2 Equity intrinsic value of Coca-Cola**

In this section, we focus on the calculation of equity intrinsic value of Coca-Cola Company using some basic equity valuation models such as dividend discounted model, multiplier models and assets-based valuation models and valuating on whether Coca-Cola Company stock is undervalued, overvalued or fairly valued through comparing estimated Company stock intrinsic value with its current market price.

### **5.2.1 Dividend discounted model (DDM)**

The Dividend discount model is a way of valuating a company based on the theory that the value of a stock is worth all of the future cash flows expected to be generated by the company, discounted by an appropriate risk-adjusted rate (McMillan, Pinto, Pirie, and Venter, 2011).

There are three different categories in calculating equity intrinsic value using dividend discount models based on the different assumption status of future dividend distribution which are Gordon growth model, two-stage dividend discount model, and multistage dividend discount model. However, we principally use two-stage dividend discount model to value Coca-Cola Company equity intrinsic value.

We know Coca-Cola Company is in a mature phase based on industry analysis which means that the company ought to have a moderate growth rate in the future and we should use Gordon growth model to assess the intrinsic value of the company. However, we find out company's development is not stable according to the actual situation. Firstly, the company is experiencing a new transformation from the regular cola to the low-sugar cola and non-carbonated drinks accompanied by enhanced awareness of consumer health, changing consumer tastes and other external factors. Secondly, although the company's whole sales declined, carbonated drinks sales still have the larger growth opportunity in some countries and regions which make the company's growth rate instable. Finally, we find that the sustainable growth rate is higher than required rate of return based on the historical data which means sustainable growth rate cannot be used in Gordon growth

model. Moreover, sustainable growth rate is also higher than economic growth rate. These factors lead us to consider the use of two-stage dividend discount model in the assessment of the intrinsic value of the company stock.

## Two-stage dividend discount model

Firstly, we assume that dividend growth decline in a linear fashion in the first stage to a sustainable, stable and low rate of growth in second stage. In addition, we suppose that the company will enter a moderate, stable growth stage after five years. We put the 2014-2018 years as the first phase, 2019 to infinity as the second phase. We divide into three steps to complete the assessment of the intrinsic value of the company's stock which are estimating the required rate of return ( $r$ ), estimating the dividend growth rate in the first stage and the second stage and estimating the equity intrinsic value.

### i. Estimating the required rate of return ( $r$ )

*Table 5.12 Basic information in calculating Required Rate of Return*

Risk Free Rate (US 10-year government bond Yield) ( $R_f$ )	1.91%
$\beta^3$	0.46
E( $R_m$ ) (S&P 500)	14.39%

*Source: <https://www.bloomberg.com> and <https://finance.yahoo.com>*

According to Table 5.12 and Capital Asset Price Model (see formula 2.21), we can get required rate of return ( $r$ ) is 7.65%.

### ii. Estimating the dividend growth rate ( $g$ )

Firstly, we estimate the dividend growth rate in the first phase ( $g_1$ ) based on the estimating on sustainable growth rate (see formula 2.22, 2.23, 2.24) described by the chapter II.

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<sup>3</sup> The calculation of  $\beta$  can be seen the Annex 5.

*Table 5.13 Selected financial data (in USD)*

Year	2009	2010	2011	2012	2013
Dividend (in millions USD)	3,795	4,062	4,300	4,595	4,969
No. shares of common stock outstanding (in millions USD)	4,628	4,616	4,568	4,504	4,434
Dividends per Share (DPS)	0.82	0.88	0.94	1.02	1.12
Earnings per Share (EPS)	1.47	2.56	1.88	2.00	1.94
Payout Ratio	0.56	0.34	0.50	0.51	0.58
ROE (Return on equity)	0.28	0.38	0.27	0.28	0.26
b (Earnings retention rate)	0.44	0.66	0.50	0.49	0.42

*Source: Coca-Cola Company Annual Reports*

According to Table 5.13 and formula 2.22, 2.23, 2.24, we can get the average sustainable growth rate is 15.11% based on average of the past five year's financial data. It is obviously that sustainable growth rate is above the estimated required rate of return which means that this estimated sustainable growth rate cannot act as a sustainable growth rate to use in the Gordon model in the future. This is the one reason why we don't use the Gordon model to estimate the Company equity intrinsic value. But we can put this growth rate act as the growth rate ( $g_1$ ) in 2014.

Secondly, we estimate the growth rate in the second phase. We use Company implied dividend growth rate as the growth rate in the second phase.

*Table 5.14 Selected financial data (in USD)*

$P_0$ (Current price of share) (31.12.2014)	42.22
$D_0$ (Last year dividends per share )	1.94
R (Required rate of return)	7.65%

*Source: <http://www.nasdaq.com>*

According to the Table 5.14 and estimating model on implied dividend growth rate (see formula 2.25), we can get the growth rate in the second phase is 2.93%. We



know the company implied dividend growth rate actually is implied by Gordon growth model. We once assume the company will enter a moderate, stable growth stage after five years which actually reflects the stock intrinsic value in the second phase can be calculated by Gordon model which is the reason why we choose the company implied dividend growth rate as the growth rate in the second phase.

Then we estimate the growth rate from 2015 to 2018 which denoted as  $g_2$ ,  $g_3$ ,  $g_4$ ,  $g_5$  respectively. We assume that dividend growth will decline in a linear fashion in the first stage to a sustainable, stable and low rate of growth in the second stage. So we get the growth rates from 2015 to 2018 are 12.06%, 9.02 %, 5.98% and 2.93%, respectively. The dividend growth rates in the first phase and the second phase are as Table 5.15.

*Table 5.15 Dividend growth rate (g) forecast*

Year	Value	$g_t$
1	$g_1$	15.11%
2	$g_2$	12.06%
3	$g_3$	9.02%
4	$g_4$	5.98%
5 and thereafter	$g_5$	2.93%

iii. Estimating the equity intrinsic value

*Table 5.16 Dividends per share (DPS) forecast (in USD)*

Year	Dividends per share	DPSt or Terminal value (TVt)	Present value at 7.65%
0	$DPS_0$	1.94	
1	$DPS_1$	2.23	2.07
2	$DPS_2$	2.50	2.15
3	$DPS_3$	2.72	2.18
4	$DPS_4$	2.89	2.15
5	$DPS_5$	2.97	2.05
5	Terminal value (TV <sub>5</sub> )	64.77	44.80

According to Table 5.16 and the two-stage dividend discount model (see formula 2.18, 2.19, 2.20), we can get the equity intrinsic value of Coca-Cola Company which is as follows:

*Table 5.17 Estimated intrinsic value (in USD)*

Intrinsic value for the first phase (V1)	10.61
Intrinsic value for the first phase (V2)	44.80
Total intrinsic value (V)	55.41

Based on the Table 5.17, we can see the equity intrinsic value of Coca-Cola Company is \$55.41. However, we know current stock price of Coca-Cola Company is \$42.22<sup>4</sup>(31.12.2014). It is obviously that the intrinsic value of Coca-Cola Company is above current stock price of Coca-Cola Company which means stock of Coca-Cola Company is underpriced. So for the investors, they can consider buying Coca-Cola Company stock.

### **5.2.2 Asset-based valuation models**

Asset-based valuation models is a type of equity valuation model which estimates stock intrinsic value from the estimated market value of the assets of a company minus the estimated market value of its liabilities. The estimated market value of the assets is often determined by making adjustments to the book value of assets and liabilities.

So we just need to estimate the company book value per share to estimate company equity intrinsic value in this section.

*Table 5.18 Selected financial data (in millions USD)*

Year	2009	2010	2011	2012	2013
Fixed assets	31,120	51,342	54,477	55,846	58,751
Current assets	17,551	21,579	25,497	30,328	31,304
Total assets	48,671	72,921	79,974	86,174	90,055
Total liabilities	23,872	41,918	48,339	53,384	56,882
Total equity	24,799	31,003	31,635	32,790	33,173

<sup>4</sup> The data comes from the website: [www.nasdaq.com](http://www.nasdaq.com).

According to Table 5.18 and asset-based valuation model method (see formula 2.34, 2.35) described in chapter II, we can get the intrinsic value of Coca-Cola Company. It is as follows:

*Table 5.19 Estimated intrinsic value*

Year	2009	2010	2011	2012	2013	Average
Book value (in million USD)	24,799	31,003	31,635	32,790	33,173	30,680
Importance	1	2	3	4	5	NA
Book value (in million USD)	24,799	62,006	94,905	131,160	165,865	31,916
Current number of stocks (in million)	NA	NA	NA	NA	NA	4,368
Intrinsic book values per share ( in USD)	NA	NA	NA	NA	NA	7.31

From Table 5.19, we can see that the intrinsic value per share of Coca-Cola Company is \$7.30, but the current stock price of Coca-Cola Company is \$42.22 (31.12.2014) per share which means that stock of Coca-Cola Company is overpriced. Moreover, there is a large difference between the intrinsic value per share of Coca-Cola Company and its current stock price. According to this result, investors can choose to sell Coca-Cola Company stock.

### **5.2.3 Multiplier models**

Multiplier models estimate the intrinsic value of the security based on share price multiples or enterprise value multiples. We mainly use the share price multiples to determine the equity intrinsic value of Coca-Cola Company.

In this section, we primarily use P/E, P/S, P/CF and P/BV these four share price multiples to evaluate the equity intrinsic value of Coca-Cola Company.

a) P/E model

P/E model mainly shows how much investors are willing to pay per dollar of earning.

*Table 5.20 Selected financial data from 2009 to 2013*

Year	2009	2010	2011	2012	2013
Earnings (in million USD)	6,824	11,809	8,584	9,019	8,584
Number of stocks (in million)	4,628	4,616	4,568	4,504	4,434
Earnings per share (EPS) (in USD)	1.47	2.56	1.88	2.00	1.94
Stock price per share (in USD)	26.38	31.96	34.59	38.45	38.07
Benchmarks (P/E Ratio, Sector - Soft Drinks)	NA	13.64	17.06	18.94	18.71

According to Table 2.20 and P/E model (see formula 2.26), we can get the P/E ratio during 2009 to 2013. It is as follows:

*Table 5.21 P/E from 2009 to 2013*

Year	2009	2010	2011	2012	2013
P/E	17.89	12.49	18.41	19.20	19.66

According to Table 5.20, Table 5.21 and formula 2.27, we can get the stock intrinsic value of Coca-Cola Company. It is as follows:

*Table 5.22 Estimated intrinsic value per share of Coca-Cola Company using P/E model*

Expected earning in 2014 (in million USD)	12,531
Current number of stocks (in million)	4,368
Expected earnings per share in 2014 (EPS) (in USD)	2.87
Average P/E during last 5 years	17.53
V(intrinsic value per share) (in USD)	50.30

From Table 5.22, we can see that the intrinsic value per share of Coca-Cola Company is \$50.30. We know the current stock price of Coca-Cola Company is \$42.22 (31.12.2014) which is less than the estimated intrinsic value per share. So the analyst infers the stock of Coca-Cola Company is underpriced. Investors can choose to invest Coca-Cola Company stock according above result. However, we can find the P/E for Coca-Cola Company is slightly higher than P/E for the whole soft sector from 2012 which means that company stock is relatively overvalued compared with the whole soft drink during these years. So it is cautious for investors to buy the Coca-Cola Company stock.

#### b) P/CF model

Using P/CF model, we mainly focused on calculation of value of cash flow and the number of stocks to determine the intrinsic value of company.

*Table 5.23 Selected financial data from 2009 to 2013*

Year	2009	2010	2011	2012	2013
Cash from Operating Activities (in million USD)	8,186	9,532	9,474	10,645	10,542
Number of stocks (in million)	4,628	4,616	4,568	4,504	4,434
Cash flow per share (in USD)	1.77	2.06	2.07	2.36	2.38
Stock price per share (in USD)	26.38	31.96	34.59	38.45	38.07

According to Table 5.23 and P/CF model (see formula 2.28), we can get the P/CF ratio during 2009 to 2013. It is as follows:

*Table 5.24 P/CF from 2009 to 2013*

Year	2009	2010	2011	2012	2013
P/CF	14.91	15.48	16.68	16.27	16.01

According to Table 5.23, Table 5.24 and formula 2.29, we can get the stock intrinsic value of Coca-Cola Company. It is as follows:

*Table 5.25 Estimated intrinsic value per share of Coca-Cola Company using P/CF model*

Expected Cash Flow from operating activities in 2014 (in million USD)	10,543
Current number of stocks (in million)	4,368
Expected cash flow from operating activities per share in 2014 (EPS) (in USD)	2.41
Average P/CF during last 5 years	15.87
V(intrinsic value per share) (in USD)	38.31

From Table 5.25, we can see the intrinsic value of Coca-Cola Company is \$38.31, but current stock price of Coca-Cola Company is \$42.22 (31.12.2014) which means the stock of Coca-Cola Company is overpriced. So for investors, Coca-Cola Company stock is not a good investment.

#### c) P/BV model

P/BV model is the financial equity valuation model which mainly calculates the book value and the number of stocks to determine the intrinsic value of company.

*Table 5.26 Selected financial data from 2009 to 2013*

Year	2009	2010	2011	2012	2013
Book value((in millions USD)	24,799	31,003	31,635	32,790	33,173
Number of stocks(in million)	4,628	4,616	4,568	4,504	4,434
Book value per share (in USD)	5.36	6.72	6.93	7.28	7.48
Stock price per share(in USD)	26.38	31.96	34.59	38.45	38.07
Benchmarks(P/S Ratio, Sector - Soft Drinks)	NA	4.74	4.9	5.22	4.99

According to Table 5.26 and P/BV model (see formula 2.30), we can get the P/BV ratio during 2009 to 2013. It is as follows:

*Table 5.27 P/BV from 2009 to 2013*

Year	2009	2010	2011	2012	2013
P/BV	4.92	4.76	4.99	5.28	5.09

Based on the Table 5.26, Table 5.27 and formula 2.31 we can get the estimated stock intrinsic value of Coca-Cola Company. It is as follows:

*Table 5.28 Estimated intrinsic value per share of Coca-Cola Company using P/BV model*

Expected book value in 2014 (in million USD)	35,816
Current number of stocks (in million)	4,368
Expected book value per share in 2014 (EPS) (in USD)	8.20
Average P/BV during last 5 years	5.01
V(intrinsic value per share) (in USD)	41.07

Based on Table 5.28, the intrinsic value of Coca-Cola Company is \$41.07. However, current stock price of Coca-Cola Company is \$42.22 (31.12.2014) which is higher than the estimated intrinsic value of Coca-Cola Company which shows the stock of Coca-Cola Company is overpriced. This result means investor can sell Coca-Cola Company stocks. Additionally, the P/BV for Coca-Cola Company is slightly exceeds P/BV ratio for the soft sector from 2010 which means company stock is relatively overvalued compared with the whole soft drink during these years. Overall, investors can consider selling Coca-Cola Company stocks based the P/BV model.

#### d) P/S model

Using the P/S model, we mainly focus on calculation of value for investors to willing to pay per dollar of revenue. There is same calculation process to calculating equity intrinsic value with the other price multiplier models.

*Table 5.29 Selected financial data from 2009 to 2013*

Year	2009	2010	2011	2012	2013
Sales (in million USD)	30,990	35,119	46,542	48,017	46,854
Number of stocks (in million)	4,628	4,616	4,568	4,504	4,434
Sales per share (in USD)	6.70	7.61	10.19	10.66	10.57
Stock price per share (in USD)	26.38	31.96	34.59	38.45	38.07
Benchmarks(P/E Ratio, Sector - Soft Drinks)	NA	1.12	1.09	1.18	1.28

According to Table 5.29 and P/S model (see formula 2.32), we can get the P/S ratio during 2009 to 2013. It is as follows:

*Table 5.30 P/S from 2009 to 2013*

Year	2009	2010	2011	2012	2013
P/S	3.94	4.20	3.39	3.61	3.60

According to Table 5.29, Table 5.30 and formula 2.33, we can get the stock intrinsic value of Coca-Cola Company. It is as follows:

*Table 5.31 Estimated intrinsic value per share of Coca-Cola Company using P/S model*

Expected sales in 2014(in million USD)	46,855
Current number of stocks(in million)	4,368
Expected sales per share in 2014 (EPS) (in USD)	10.73
Average P/S during last 5 years	3.75
V(intrinsic value per share) (in USD)	40.21

From Table 5.31, we can see that the intrinsic value per share of Coca-Cola Company is \$40.21. We know the current stock price of Coca-Cola Company is \$42.22 (31.12.2014) which exceeds the estimated intrinsic value per share. This result shows stock of Coca-Cola Company is overvalued. In addition, we can figure out the P/S for Coca-Cola Company has increasing and it is higher than the sector benchmarks which also shows the Coca-Cola Company stock is overvalued compared with the whole soft



drink during these years. These results suggest investors select to sell the Coca-Cola Company stock.

### 5.3 Summary of equity intrinsic value of Coca-Cola

We mainly summarize the estimated stock intrinsic value of the Coca-Cola Company using the financial equity valuation models and give the assessment and recommendation for Coca-Cola Company stock in this section.

#### 5.3.1 Estimated equity intrinsic value of Coca-Cola

Following Table 5.32 shows the estimated weighted stock intrinsic value of Coca-Cola Company which based on the Table 5.17, 5.19, 5.22, 5.25, 5.28 and 5.31.

*Table 5.32 Estimated weighted stock intrinsic value of Coca-Cola Company (in USD)*

Equity valuation models	Estimated intrinsic value	Weights	Estimated weighted intrinsic value
Two-stage dividend discount model	55.41	0.3	16.62
Asset-based valuation models	7.31	0.3	2.19
P/E model	50.30	0.1	5.03
P/CF model	38.31	0.1	3.83
P/BV model	41.07	0.1	4.11
P/S model	40.21	0.1	4.02
Total		1	35.80

We can see estimated weighted stock intrinsic value of Coca-Cola Company is \$35.80.

#### 5.3.2 Assessment of equity intrinsic value of Coca-Cola

The current stock price of Coca-Cola Company is \$42.22 (31.12.2014).

Comparing estimated weighted stock intrinsic value with current stock price of Coca-Cola Company, we can find it is obviously that the stock current price of Coca-

Cola Company is higher than stock intrinsic value of Coca-Cola Company which indicates that the Coca-Cola Company stock is overpriced. This result suggests the investors should sell the Coca-Cola Company stocks since the estimated intrinsic value per share is significant less than current stock price.

## 5.4 SWOT analysis

We primarily use SWOT analysis to measure the current situation of Coca-Cola Company including the strengths, weaknesses, threats and opportunities and give our recommendations strategies on how Coca-Cola Company improve itself in this section.

*Table 5.34 SWOT matrix of Coca-Cola Company*

<div style="text-align: center;"> <div style="display: inline-block; transform: rotate(-45deg);">Internal</div> <div style="display: inline-block; transform: rotate(45deg);">External</div> </div>	Strengths	Weaknesses
	1. World's largest brand 2. World's largest market share in beverage 3. Most extensive beverage distribution channel 4. Customer loyalty	1. Undiversified product portfolio 2. Significantly focusing on carbonated drinks 3. Brand failures or many brands with insignificant amount of revenues 4. High debt level
Opportunities	SO strategy	WO strategy
1. Bottled water consumption growth 2. Increasing demand for healthy food and beverages 3. Growing beverages consumption in emerging markets	Pay attention on product with low amount of sugar and calories and market share in development country	Develop other product market such as food market and terminate the operation on unprofitable brands
Threats	ST strategy	WT strategy
1. Water scarcity. 2. Changes in consumer tastes. 3. Increasing cost 4. Strong competition 5. Changes in laws and regulations	Improve the distribute and deliver way to decrease the operating cost and take the measure to suit the change in the market and law environment	Diversify and optimize product portfolio and then to meet consumer demand and improve the company's competitiveness

### **Strengths in the SWOT of Coca-Cola Company**

- World's largest brand - The Coca Cola Company is the most valued brand in the world which reached the \$77,839 billion in 2013.
- World's largest market share in beverage - Coca Cola holds the largest beverage market share in the world which was about 40% in 2013.
- Strong marketing and advertising - Coca Cola's advertising expenses accounted for more than \$3 billion in 2012 and increased firm's sales and brand recognition.
- Most extensive beverage distribution channel - Coca Cola serves more than 200 countries and more than 1.7 billion servings a day.
- Customer loyalty - The firm has one of the most loyal consumer groups.

### **Weaknesses in the SWOT of Coca-Cola Company**

- Undiversified product portfolio - Coca-Cola Company is still focusing only on beverage industry which is the unfavorable for the company. We know the whole consumption of soft drinks is declining which will affect the company performance.
- Significantly focusing on carbonated drinks - The business is still focusing on selling Coke, Fanta, Sprite and other carbonated drinks. This strategy works in short term as consumption of carbonated drinks will grow in emerging economies but it will be weak as the world is fighting obesity and is moving towards consuming healthier food and drinks.
- Brand failures or many brands with insignificant amount of revenues - Coca Cola currently has more than 500 brands but only few of the brands result in more than \$1 billion sales.
- High debt level due to acquisitions - Nearly \$8 billion of debt acquired from CCE's acquisition significantly increased Coca Cola's debt level which affected the company performance.

### **Opportunities in the SWOT of Coca-Cola Company**

- Bottled water consumption growth - Consumption of bottled water is expected to grow both in the world especially in US.
- Increasing demand for healthy food and beverages - Due to more and more people begin to care about the obesity problem, demand for healthy food and beverages has increased drastically. The Coca Cola Company has an opportunity to further expand its product range with drinks that have low amount of sugar and calories.
- Growing beverages consumption in emerging markets - Consumption of soft drinks is still significantly growing in emerging markets, especially BRIC countries, where Coca Cola Company could seize the opportunity increase its beverages market share.

### **Threats in the SWOT of Coca-Cola Company**

- Changes in consumer tastes - Consumers around the world become more concerning about health conscious and reduce their consumption of carbonated drinks, drinks that have large amounts of sugar, calories and fat.
- Water scarcity - Water is becoming scarcer around the world and increases in cost and criticism for Coca Cola over the large amounts of water used in production.
- Increasing cost - Production costs has been increasing mainly result from the increase in raw material costs which leads the gross profit and net profit margins decreasing.
- Strong competition - It mainly comes from the PepsiCo Company and other companies producing the health drinks.
- Changes in laws and regulations - Changes in laws and regulations relating to beverage containers and packaging could has an negative impact company costs, product demand and further negatively affect our financial performance.

## **5.5 Investment recommendation**

According to the financial analysis, we can know the Coca-Cola Company has a relatively better financial status with good profitability, higher liquidity and higher efficiency of asset utilization. However, company's high debt will be the barriers of future development of Coca-Cola Company and influence the Coca-Cola company stock price.

According to intrinsic value of Coca-Cola Company, we can know stock of Coca-Cola Company is significantly underpriced using two-stage dividend discount model and P/E multiplier model. Assets-based model indicates that the Coca-Cola Company stock is overpriced. However, we think this result is undesirable since the estimated intrinsic value per share of Coca-Cola Company stocks using assets-based model is only 7.31% which has the larger difference with the estimated intrinsic value per share using other evaluation model. Additionally, the estimated intrinsic value per share using the P/S multiplier model, P/BV multiplier model and P/CF multiplier model is also less than the current stock price. However, according to estimated weighted stock intrinsic value of Coca-Cola Company, the stock current price of Coca-Cola Company is obviously higher than stock intrinsic value of Coca-Cola Company which indicates that the Coca-Cola Company stock is overpriced. So for investors, they should sell the Coca-Cola Company stocks.

According to SWOT analysis, the company's strengths mainly come from the dominance of carbonated drinks, high visibility, good brand as well as high customer loyalty. The major weaknesses of the company derive from the product structure and capital structure. The company's growth opportunities are mainly from an increase in non-carbonated soft drinks market demand. The company's threat mainly derived from the change in consumer attitudes, strengthen in government regulation as well as increase in production cost. Additionally, we give the development strategic in terms of current situation. Based on the SO strategy, Coca-Cola Company should pay more attention on product with low amount of sugar and calories and market share in development country. From WO strategy, Coca-Cola Company should develop other product markets such as food market and terminate the operation on unprofitable brands. Based on ST strategy,

Coca-Cola Company should improve distribute and deliver way to decrease the operating cost and take the measure to suit the change in the market and law environment. Based on WT strategy, Company should diversify and optimize product portfolio and try to meet consumer demand and improve the company's competitiveness.

Overall, investors are suggested to select to **sell** the Coca-Cola Company stocks based on this fundamental analysis.

## 6 Conclusion

Fundamental analysis is the analysis method which evaluates the security attempting to measure everything that can affect the security's value including macroeconomic factors, industry factors and company-specific factors and estimates the company stock intrinsic value.

We mainly use fundamental analysis method including macroeconomic analysis, industry analysis and company analysis to complete the analysis, establishment and assessment on the equity intrinsic value of the Coca-Cola Company and further give the answers and recommendations on issues raised in the introduction section.

According to the macroeconomic analysis of global economy and U.S. economic environment, we can know the external macro-economic environment is not optimistic, but in improving. According to the industry analysis, industry environment is not optimistic for Coca-Cola Company which is unfavorable for company stock prices on the whole. According to the company analysis, we can know the company has a relatively better financial status and some other better internal conditions for the company stock price. But company still face some threats such as high debt and so all which are unfavorable for company stock prices. Moreover, the Coca-Cola Company stock is overpriced based on summarized estimated weighted intrinsic value. The investors are suggested to select to sell the Coca-Cola Company stocks.

Although we know the current macroeconomic situation and industry environment are not conducive to development of the stock market, improving and upturn the economic situation, growing non-carbonated beverages demand as well as company's high visibility will provide a new round of growth opportunity for the development of Coca-Cola Company and company stock price. But this requires the Coca-Cola Company to seize the opportunities for new non-carbonated drinks market expansion.

However, investors are suggested to **sell** the Coca-Cola Company stocks on the whole.

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## List of Abbreviations

GDP	Growth domestic product
CPI	Consumer price index
EBIT	Earnings before interest and taxes
NOPAT	Net operating profit after taxes
EBT	Earnings before taxes
EAT	Earning after taxes
ROA	Return on assets
ROE	Return on equity
DCF	Discount cash flow
DDM	Dividend discount model
CAPM	Capital Asset Price Model
WACC	Weight average cost of capital
SGR	Sustainable growth rate
WEO	World Economic Outlook
U.S.	United States
NARTD	Non-alcoholic ready- to-drink
KO	Coca-Cola Company
PEP	Pepsi Company
MNST	Monster Beverage Corporation
COT	Cott Corporation
CCE	Coca-Cola Enterprises
EPS	Earnings per Share
DPS	Dividends per share
TV	Terminal value

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Ostrava dated 21/04/2015



Min Wang

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## Annexes

### Annex 1

Coca-Cola Company income statements from 2009 to 2013 (In Millions of USD)

Year	2009	2010	2011	2012	2013
Revenues	30,990	35,119	46,542	48,017	46,854
Cost of Revenue	11,088	12,693	18,215	19,053	18,421
Gross profit	19,902	22,426	28,327	28,964	28,433
Selling, general and administrative expenses	11,358	13,158	17,422	17,738	17,310
Other operating charges	313	819	732	447	895
Operating Income	8,231	8,449	10,173	10,779	10,228
Interest income	249	317	483	471	534
Interest expense	355	733	417	397	463
Equity income (loss) — net	781	1,025	690	819	602
Other income (loss) — net	40	5,185	529	137	576
Income before taxes	8,946	14,243	11,458	11,809	11,477
Income taxes	2,040	2,384	2,812	2,723	2,851
Net income attributable to non-controlling interests	82	50	62	67	42
Net Income	6,824	11,809	8,584	9,019	8,584

## Annex 2

### Coca-Cola Company balance sheet from 2009 to 2013 (In Millions of USD)

Assets	2009	2010	2011	2012	2013
Cash and Equivalents	7,021	8,517	12,803	8,442	10,414
Marketable Securities	2,192	2,820	1,232	8,109	9,854
Receivables	3,758	4,430	4,920	4,759	4,873
Inventories	2,354	2,650	3,092	3,264	3,277
Prepaid Expenses	2,226	3,162	3,450	5,754	2,886
Total Current Assets	17,551	21,579	25,497	30,328	31,304
Property/Plant/Equipment, Total - Gross	16,467	21,706	23,151	23,486	25,032
Accumulated Depreciation, Total	-6,906	-6,979	-8,212	-9,010	-10,065
Goodwill, Net	4,224	11,665	12,219	12,255	12,312
Intangibles, Net	8,604	15,244	15,450	15,082	15,299
Long Term Investments	-	7,585	7,388	10,448	11,512
Other Long Term Assets, Total	8,731	2,121	4,481	3,585	4,661
Total Non-Current Assets	31,120	51,342	54,477	55,846	58,751
Total Assets	48,671	72,921	79,974	86,174	90,055
Equity and liabilities					
Accounts Payable	6,393	8,586	9,009	8,680	9,577
Short-Term Debt	6,800	9,376	14,912	17,874	17,925
Other Current Liabilities	528	546	362	1,267	309
Total Current Liabilities	13,721	18,508	24,283	27,821	27,811
Long Term Debt	5,059	14,041	13,656	14,736	19,154
Deferred Income Tax	1,580	4,261	4,694	4,981	6,152
Other Non-Current Liabilities	2,965	4,794	5,420	5,468	3,498
Minority Interest	547	314	286	378	267
Total Non-Current Liabilities	10,151	23,410	24,056	25,563	29,071
Total Liabilities	23,872	41,918	48,339	53,384	56,882
Common Stocks	880	880	1,760	1,760	1,760
Capital Surplus	8,537	10,057	10,332	11,379	12,276
Retained Earnings	41,537	49,278	53,621	58,045	61,660
Treasury Stock	-25,398	-27,762	-31,304	-35,009	-39,091
Other Equity	-757	-1,450	-2,774	-3,385	-3,432
Total Equity	24,799	31,003	31,635	32,790	33,173
Total Liabilities & Equity	48,671	72,921	79,974	86,174	90,055

### Annex 3

#### Coca-Cola Company cash flow statements from 2009 to 2013 (In Millions of USD)

Year	2009	2010	2011	2012	2013
Net Income/Starting Line	6,906	11,837	8,646	9,086	8,626
Depreciation/Depletion	1,236	1,443	1,954	1,982	1,977
Deferred Taxes	353	604	1,035	632	648
Non-Cash Items	255	-4,722	-268	25	223
Changes in Working Capital	-564	370	-1,893	-1,080	-932
Cash from Operating Activities	8,186	9,532	9,474	10,645	10,542
Capital Expenditures	-1,993	-2,215	-2,920	-2,780	-2,550
Other Investing Cash Flow Items, Total	-2,156	-2,190	396	-8,624	-1,664
Cash from Investing Activities	-4,149	-4,405	-2,524	-11,404	-4,214
Financing Cash Flow Items	-2	50	45	100	17
Total Cash Dividends Paid	-3,800	-4,068	-4,300	-4,595	-4,969
Issuance (Retirement) of Stock, Net	-854	-1,295	-2,944	-3,070	-3,504
Issuance (Retirement) of Debt, Net	2,363	1,848	4,965	4,218	4,711
Cash from Financing Activities	-2,293	-3,465	-2,234	-3,347	-3,745
Effect of Exchange Rate Changes	576	-166	-430	-255	-611
Net Cash Flow	2,320	1,496	4,286	-4,361	1,972

## Annex 4

Coca-Cola Company (NYSE:KO) stock prices from 2005 to 2015 (In USD)

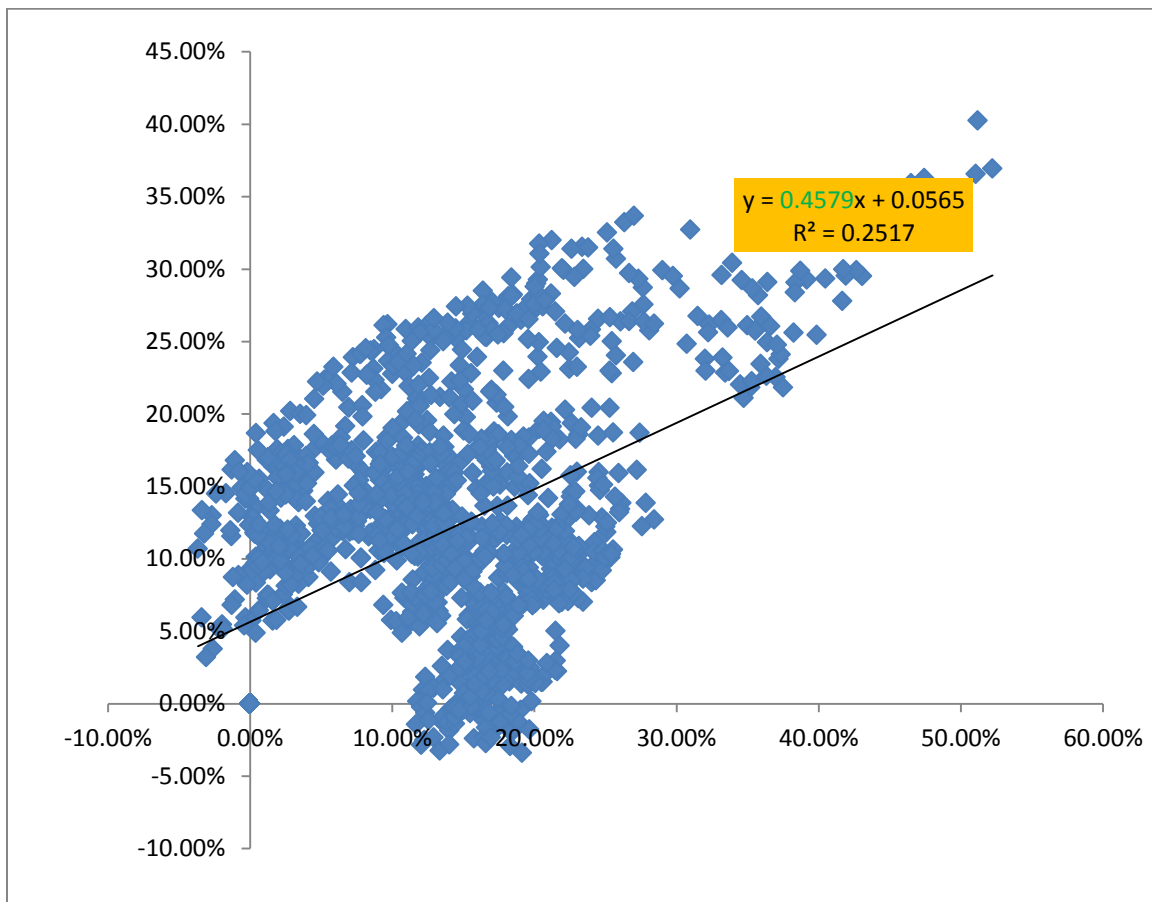


Source: [www.nasdaq.com](http://www.nasdaq.com)



## Annex 5

The sensitivity of Coca-Cola Company stocks to the whole stock market



Source: <https://finance.yahoo.com>